

MICHIGAN HEALTH INFORMATION TECHNOLOGY COMMISSION

August 21, 2014

The Michigan Health IT Commission is an advisory Commission to the Michigan Department of Community Health and is subject to the Michigan open meetings act, 1976 PA 267, MCL 15.261 to 15.275



Agenda

- A. Welcome & Introductions
- B. Review & Approval of 06/19/2014 Meeting Minutes
- C. HIT/HIE Update
- D. MiHIN MOAC Use Case Workgroup
- E. Michigan Cancer Surveillance and Birth Defects Program-Supporting Meaningful Use
- F. HITC Next Steps
- G. Public Comment
- H. Adjourn



Welcome & Introductions

- Commissioner Updates



HIT/HIE Update

Meghan Vanderstelt, MDCH



August 2014 Updates

- MiHIN
- Michigan Cyber Security Council
- Learning Health Summit
- ONC 10 Year Vision-State Interoperability Workgroup
- MDCH Consent Workgroup
- Long-Term Care Process Improvement





Nationwide Interoperability Roadmap Community Home

Created by Ali Khan, last modified by Elizabeth So on Aug 06, 2014

This is a general solicitation of public input for the Nationwide Interoperability Roadmap

See this page for more information on participating in this community: [Instructions for Joining, General Instructions and Rules of Engagement](#)

Background Information

ONC published an Interoperability Vision Paper called "Connecting Health and Care for the Nation: A 10-Year Vision to Achieve an Interoperable Health IT Infrastructure". As mentioned in the paper, ONC will lead in the development of a shared, Nationwide interoperability roadmap. This roadmap will be a platform to ensure stakeholders can connect care, improve health, and develop the health IT ecosystem that can be part of the larger learning health system. The roadmap will cover stakeholders across the care delivery, health IT and related industries and should not be viewed as an HHS or federal government roadmap. The roadmap will be a companion to the Interoperability Vision Paper and dives deeper on how we can collectively achieve the 3, 6, and 10 year interoperability milestones described in the paper.

Process and Plan for Input

Therefore, ONC is convening a variety of opportunities to collect input to inform what will become a shared, Nationwide interoperability roadmap. Your comments, input and answers to the questions posed in this interactive community will support the development of the Nationwide interoperability roadmap. We are asking that everyone provide his or her thoughts and comments for this first draft by **Friday, September 12, 2014**. That will give us time to synthesize all of the suggestions and feedback and account for as much of it as possible in the draft roadmap that will be presented to our Federal Advisory Committees (FACAs) for their input and recommendations in October. We anticipate version 1.0 to be posted for public comment in early 2015.

Building Blocks

As mentioned in the vision paper, we will aim to develop a shared agenda that focuses on five critical building blocks for a nationwide interoperable health information infrastructure:

BUILDING BLOCK #1: CORE TECHNICAL STANDARDS AND FUNCTIONS

BUILDING BLOCK #2: CERTIFICATION TO SUPPORT ADOPTION AND OPTIMIZATION OF HEALTH IT PRODUCTS AND SERVICES

BUILDING BLOCK #3: PRIVACY AND SECURITY PROTECTIONS FOR HEALTH INFORMATION

BUILDING BLOCK #4: SUPPORTIVE BUSINESS, CLINICAL, CULTURAL, AND REGULATORY ENVIRONMENT

BUILDING BLOCK #5: RULES OF ENGAGEMENT AND GOVERNANCE OF HEALTH INFORMATION EXCHANGE

These building blocks are interdependent and progress must be incremental across all of them over the next decade to realize this vision. We will develop a more comprehensive set of use cases and goals for three, six and ten-year timeframes that will guide work in each of the building blocks, including alignment and coordination of prioritized federal, state, tribal, local, and private sector actions.

The building blocks are further described in the [Vision Paper](#) and on each of the pages with the Questions for each building block (see menu to the left and below).

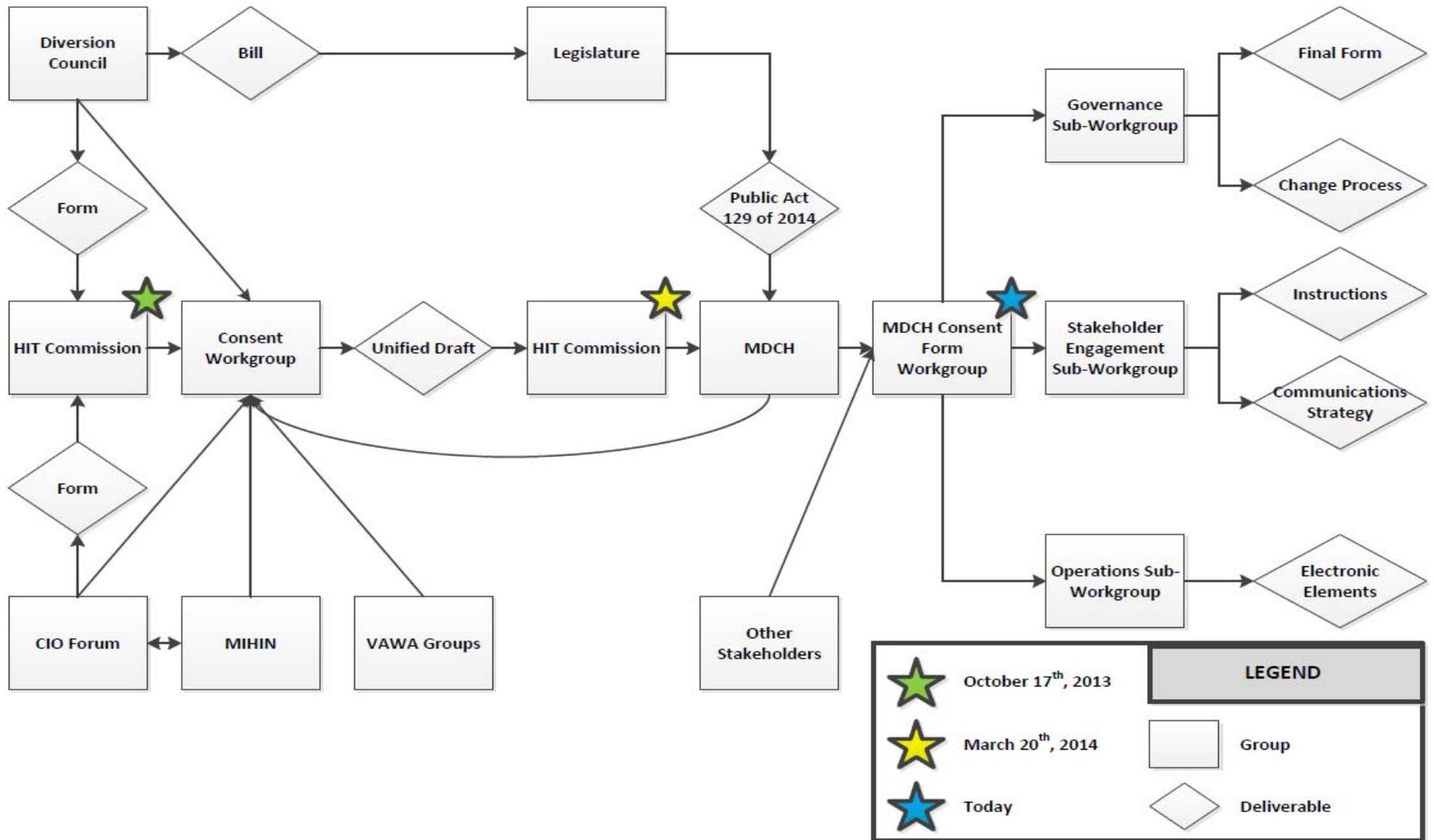
General Instructions

- In order to provide input and participate in the community you must request a confluence account. You however do not need an account to access and view the activity in the community. See this page for more information on participating in this community: [Instructions for Joining, General Instructions and Rules of Engagement](#)
- Please respond to some or all of the questions in a manner you prefer (the links to the questions are in the left menu)
- Consider this a community forum and an opportunity to interact with others in the community
- For those who prefer not to respond to the questions, feel free to provide general input for the roadmap or ask new questions to the community by creating new comment(s) below or on this page: [General Suggestions and Feedback](#)

ONC National Roadmap

- ONC published an Interoperability Vision Whitepaper called "Connecting Health and Care for the Nation: A 10-Year Vision to Achieve an Interoperable Health IT Infrastructure".
- ONC is working to develop a shared, nationwide interoperability roadmap. This roadmap will help promote care coordination, improved health, and the development of a health IT ecosystem that can be part of the larger learning health system.
- Your comments, input, and answers to the questions posed in this interactive community will support the development of the roadmap.
- The HIT Office asks that each Commissioner provide his or her thoughts and comments for this first draft by **Friday, September 12, 2014**
- <http://confluence.siframework.org/display/NIRCH/Nationwide+Interoperability+Roadmap+Community+Home>

The History of the Common Consent Form
By Phil Kurdunowicz, MDCH



MiHIN Use Case Overview

Dr. Tim Pletcher

MiHIN



MiHIN Use Case Overview

A Brief Introduction and Overview

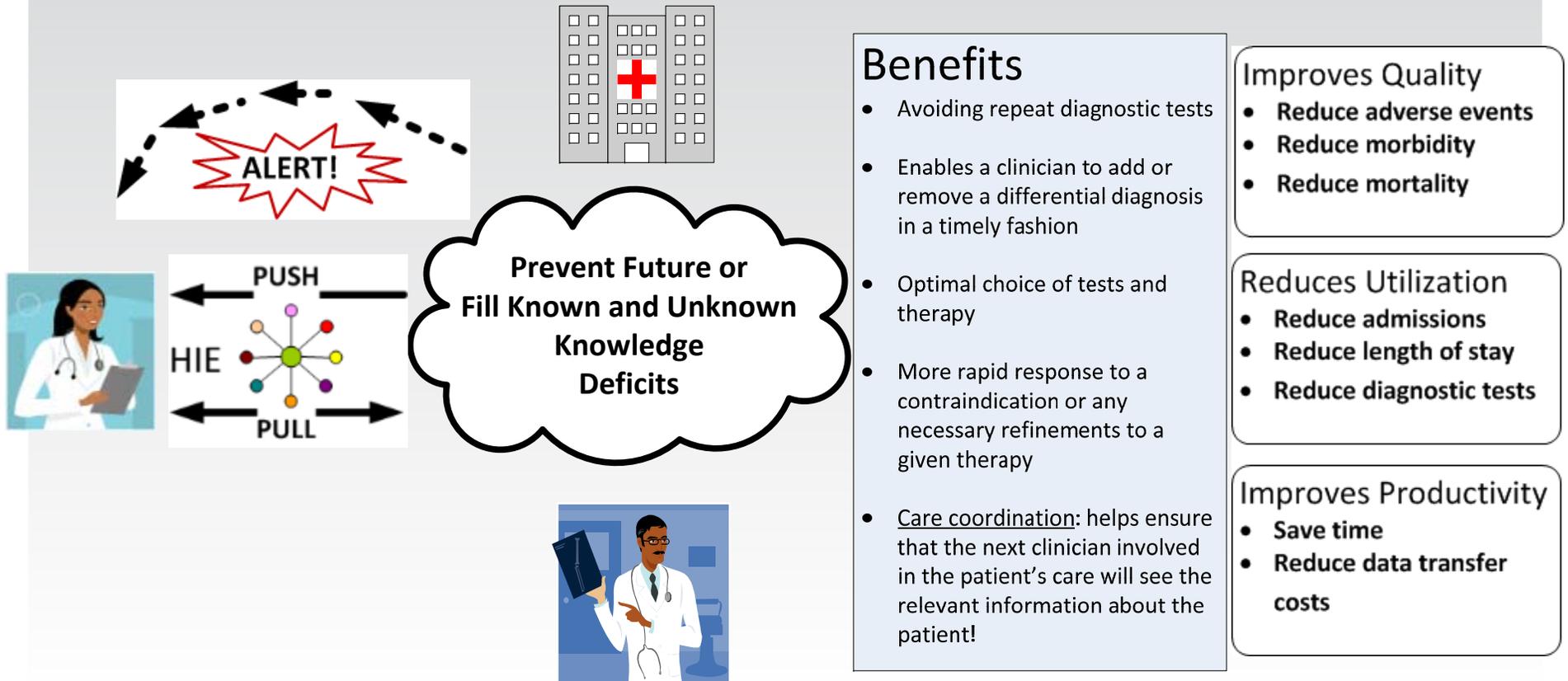


MiHIN
Shared Services

Dr. Tim Pletcher
Executive Director
pletcher@mihin.org

August, 21 2014

What Does HIE (verb) Do?



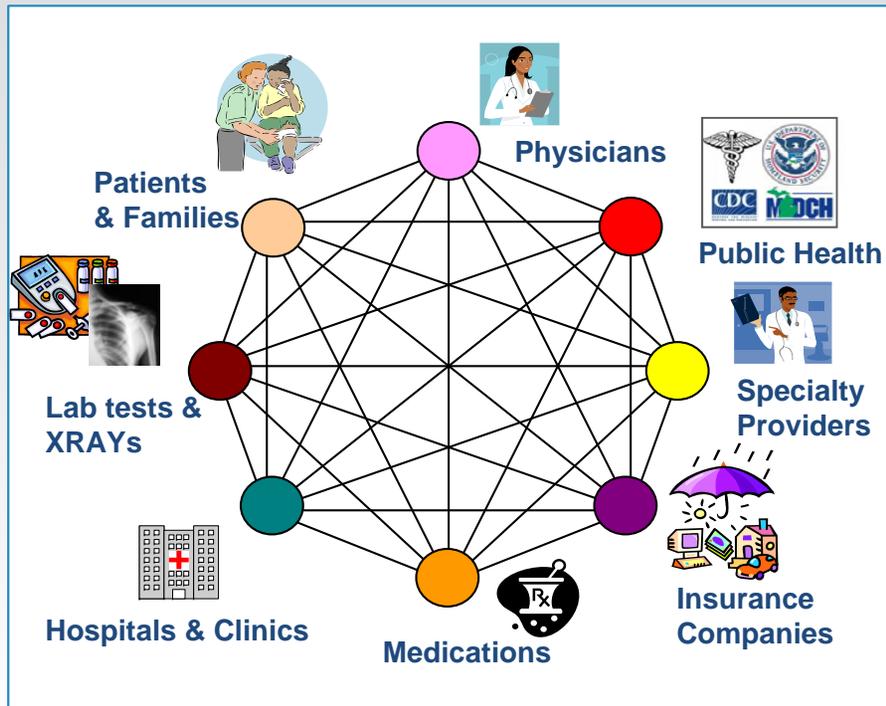
MiHIN is a

shared network for
exchanging health
information ***statewide***
for Michigan

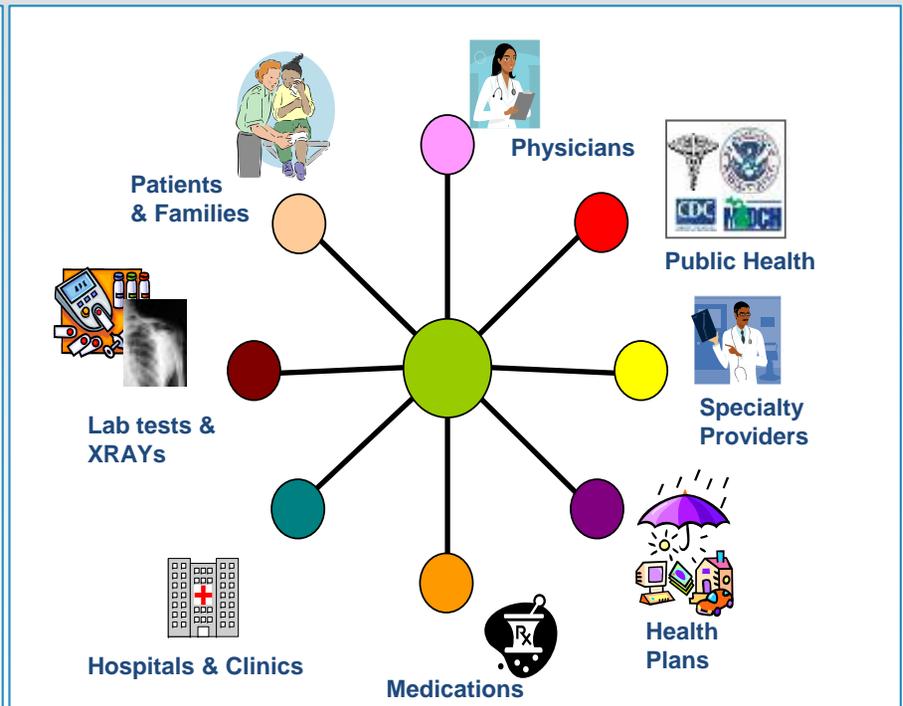


Statewide Coordination

Duplication of Effort & Expense



Shared Services



“One and Done” - Easier, Simplified, Predictable Data Sharing

1. **Sign once**
 - a. Common legal framework across the state
 - b. Transparent data usage for each use case
2. **Connect once**
 - a. MiHIN network includes all of health care: HIEs, HISPs, health plans, the state and the federal agencies
3. **Publish once**
 - a. Patient and provider delivery preferences easily registered and centrally managed
4. **Report once**
 - a. Messages can be routed to multiple destinations – no duplicate interfaces or repeat reports
5. **Log-on once**
 - a. Single sign-on across patient/member and provider portals

MiHIN FAST FACTS

Network of Networks (not an HIE)

Shared network of multiple **qualified** organizations (QOs) for sharing data

Transparency via Governor's HIT Commission

Strong state and health plan representation

Statewide Approach

Driven by **Use Cases**

Leverages public health code & **Meaningful Use**

Public-private model vs. complete state control

Accomplishments (established 2010)

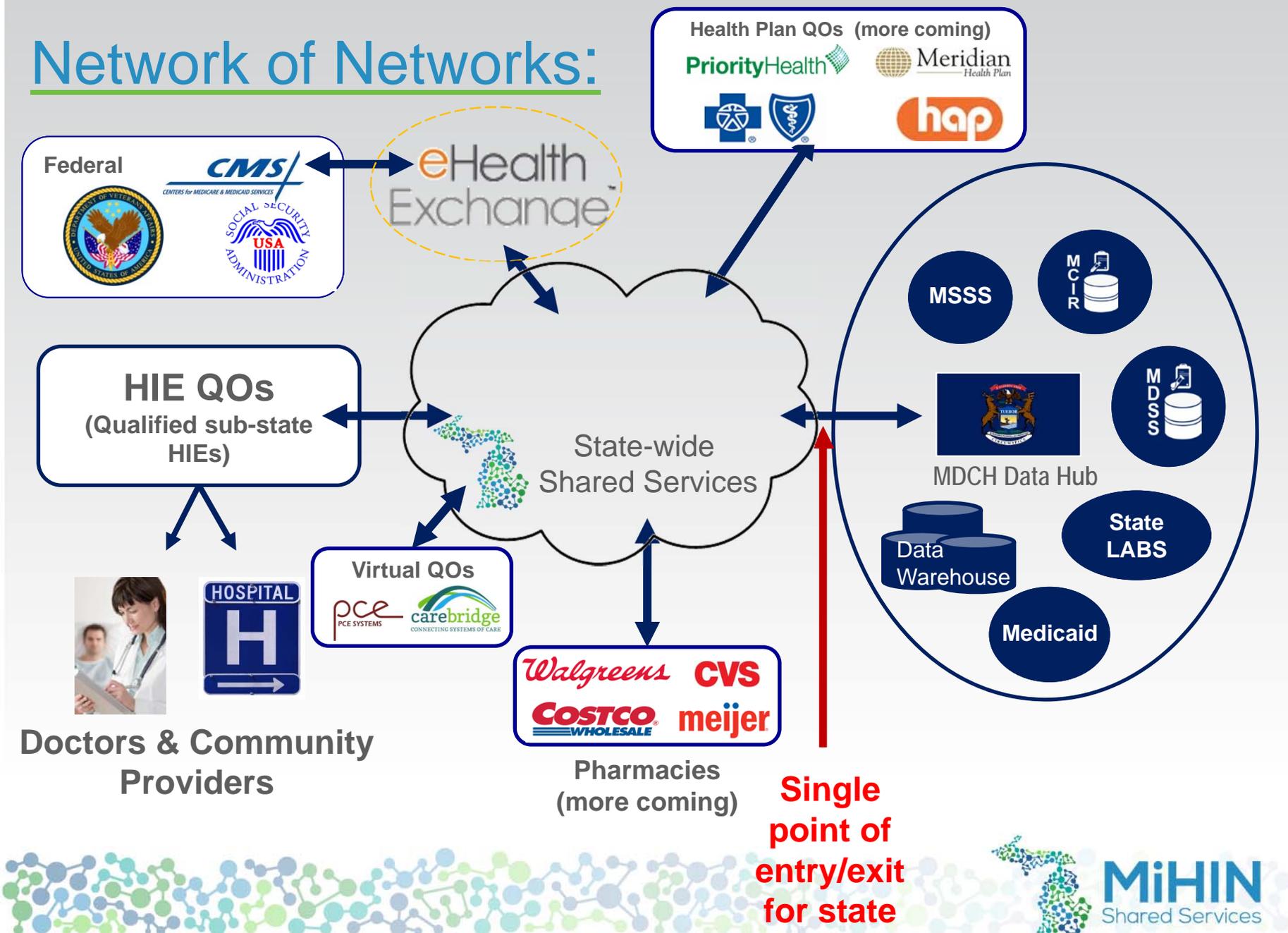
From zero to 45M+ production messages in 3 years

18 QO connections:
8 HIEs, 4 payers,
4 pharmacies, state,
2 others

Health Provider Directory, certified eHealth Exchange node, EHNAC-DTAAP Direct



Network of Networks:



Types of Qualified Organizations

HIE QO (HQO)

- Meets the QO requirements
- Plans to participate in at least 2/3 of Use Cases
- Voice in the MiHIN Advisory Committee (MOAC)

Plan/Payor QO (PQO)

- Health Plan licensed in the state of Michigan
- Blue Cross, Michigan Association of Health Plans, & Priority Health have MOAC & Board eligibility

Government QO (GQO)

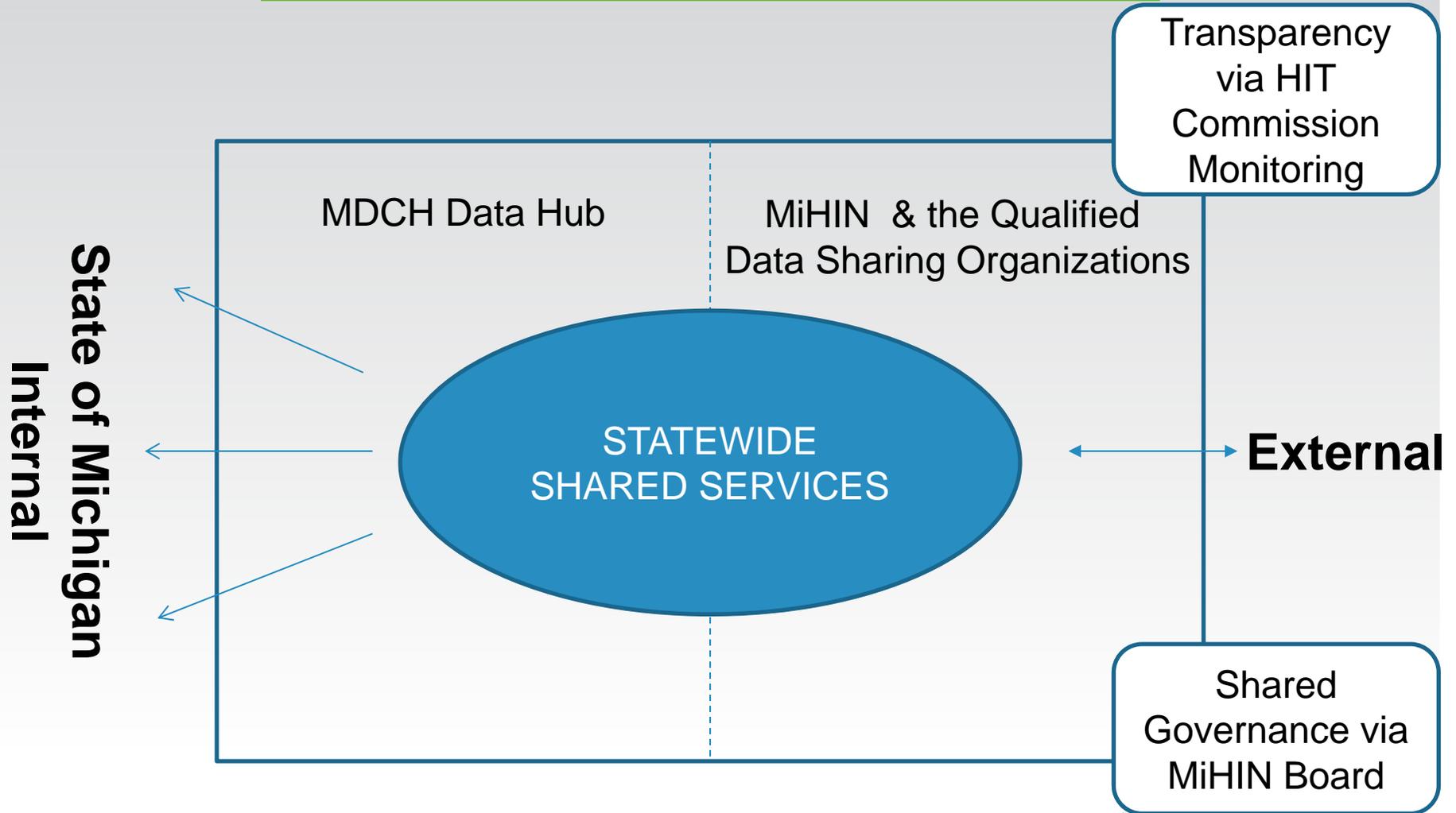
- Government Qualified Organization (i.e. Michigan Department of Community Health)
- Federal Agency (i.e. Social Security Administration, CMS, Veterans Affairs, DoD, CDC, etc.)
- Tribal Nations in Michigan

Consumer QO (CQO)

- Participate in consumer-focused Use Cases (i.e. MiWay Consumer Directory)
- Supported & authorized consumer facing services (i.e. Patient Health Record, Patient Portal) an example would be Peace of Mind Registry



Maximize SOM Resources



Benefits of the Michigan model

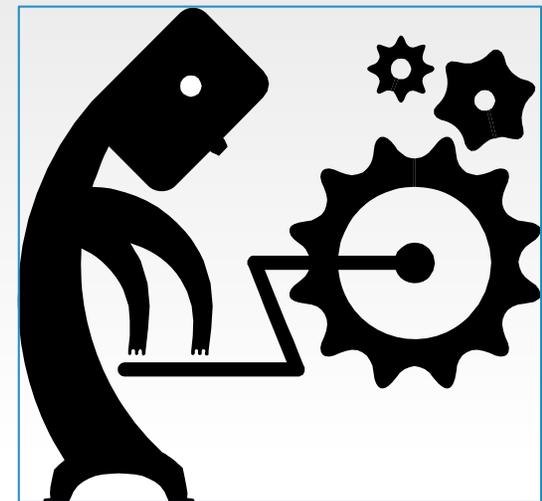
- **Cybersecurity**-single point of entry that reduces external department/agency connections
- **Division of labor**- allows State focus on data sharing among state systems and pursuit of the State's agenda
- **Reduces cost**- State does not foot the entire bill
- **Flexibility**- separate entity allows greater speed, adaptability to changing technology, not part of interdepartmental politics
- **Arms length “public-private partnership”**- opportunity for major public influence without always being the first line of criticism or dominating private interests



What is a USE CASE?

- A data sharing scenario with a clear purpose, type of data exchanged, and descriptions of interactions among main people and/or systems
- Each Use Case may have different:
 - access restrictions
 - data usage rules
 - cost recovery fees or charges
 - technical requirements

MiHIN Use Case Factory



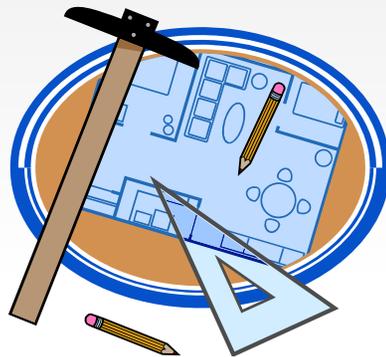
Use Case Components



Use Case Summary- explains purpose and value for sharing data



Use Case Agreement –legal document that covers expected rules of engagement (all Qualified Organizations sign them)



Implementation Guide–technical specification document that outlines standards format details for transmission



Use Case Summary

MOAC Use Case Summary Form

Name of UC: Newborn Screening for CCHD Project (NBS CCHD)
Sponsor(s): Michigan Dept of Community Health
Date: February 28, 2014

The purpose of the MOAC Use Case Summary Form is to allow the Sponsor of a proposed Use Case (UC) to provide the MOAC Use Case Work Group information needed to evaluate and provide feedback to the Sponsor and eventually the MiHIN Board. The feedback is will assist the HIE Community with understanding where this UC fits within the overall Strategic Priority Plans.

The MOAC UC Summary Form is split into several sections to allow the Sponsor to speak to the impact of the proposed UC in the following areas: Health Outcomes, Regulation, Cost and Revenue, Implementation Challenges, Vendor Community, and Support.

Health Outcomes

In this section, provide summary information on the UC's potential impact on Individual Patient Health and Safety, Patient Health (larger scale – groups, ACO, PO, etc.), Public Health Safety Detection, Public Health Reporting, and/or impacts to the Medicaid Population.

Health Outcomes Summary:

With a large percentage of the births in Michigan covered by Medicaid (on average, over 40%), the receipt of Critical Congenital Heart Defect (CCHD) test screening results in a near Real-Time fashion from the state's birthing hospitals will assist with the Michigan Department of

Aligns with scoring survey

- Health Outcomes
- Regulation
- Cost & Revenue
- Implementation Challenges
- Vendor Preparedness
- Support

Prioritization Scoring for Medication Reconciliation Use Case

Health Outcomes

For the "Health Outcomes" section please prioritize each of the criteria with 1 being the lowest and 7 being the highest.

*2. Patient Health and Safety (individual)

1-LOW 2 3 4 5 6 7-HIGH N/A

Comments

- *Three summaries reviewed and scored*
- *Addressing governance / scoring format and questions*
- *Voices missing from use case evaluation*



Legal Infrastructure for Data Sharing

ORGANIZATION AGREEMENT
(QDSOA, VQDSOA, CQDSOA,
SSOA, SSSOA, other "OA")

Definitions

Basic Connection Terms

Basic BAA Terms

Minimal Operational SLA

Contracting & Payment

Cyber Liability Insurance

Termination

Data Sharing Agreement

Use Case
#1

Use Case
#2

Use Case
#3



Public vs. Private Model

All HIE subject to HIPAA & Michigan Public Health Code

(A) State-wide HIE Under the MiHIN Governance Structure:

Highly transparent & publicly visible model for data sharing based on the MiHIN Community of “Qualified Organizations” & common “Use Case Agreements”

- Broad multi-stakeholder involvement
- State government designated entity
- Should reduce concerns about restraint of trade

(B) HIEQO's:
Private data sharing agreements among private parties



Major Use Cases

Results Delivery

- **Lab results**
- Diagnostic imaging
- Other tests
- Hospital discharge summaries

Public Health Reporting

- **Immunizations**
- Chronic disease registries
- **Disease surveillance**
- **Syndromic surveillance**
- Birth & death notifications
- 41 new use cases under HIT APD

Care Coordination & Patient Safety

- Referrals
- Care summaries for treatment history & allergies
- **Notification of transitions of care (Admit Discharge or Transfer)**
- Medication reconciliation & therapy change notices
- Clinical decision support alerts

Quality & Administrative Reporting

- Registry Updates
- **Physician Quality Reporting measures**
- **Meaningful Use reporting**
- Electronic verification
- Patient satisfaction
- Eligibility
- Authorization
- Claims audit

Patient/Consumer Engagement

- Instructions
- Health risk appraisals
- Medication Compliance
- Therapy Compliance
- Patient activation and self determination
- Health literacy & numeracy



Infrastructure Use Cases

**Active Care
Relationship
Service**

**Patient Opt-In
Preferences**

**Federated
Identity
Management
(FiDM)**

**Gateway
Services (e.g.
XCA)**

**Master Person Index
(Common Key)**

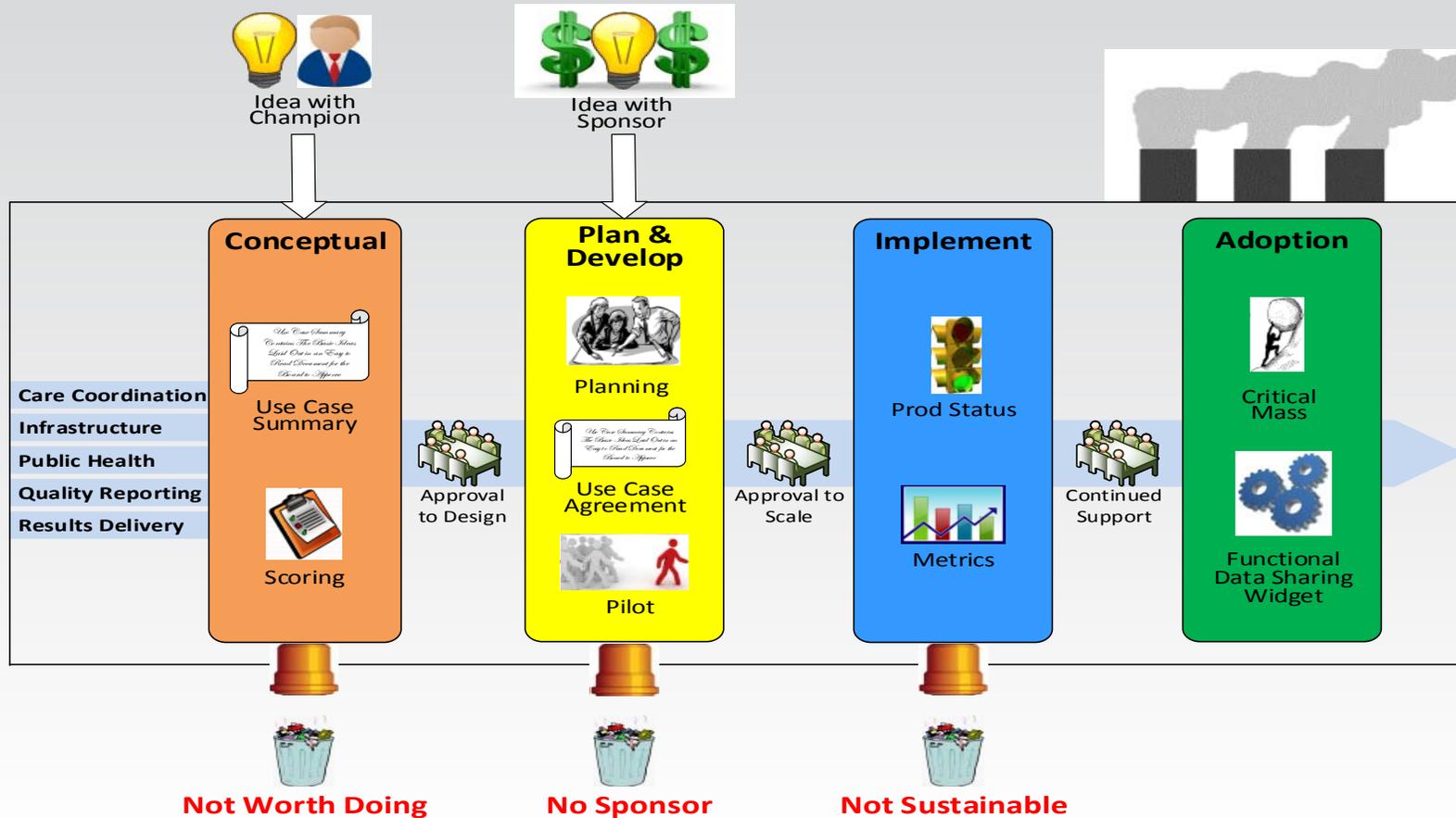
**Identity
Management**

**Health
Provider
Directory**

**Secure Transport Layer Services and
Digital Credentials**



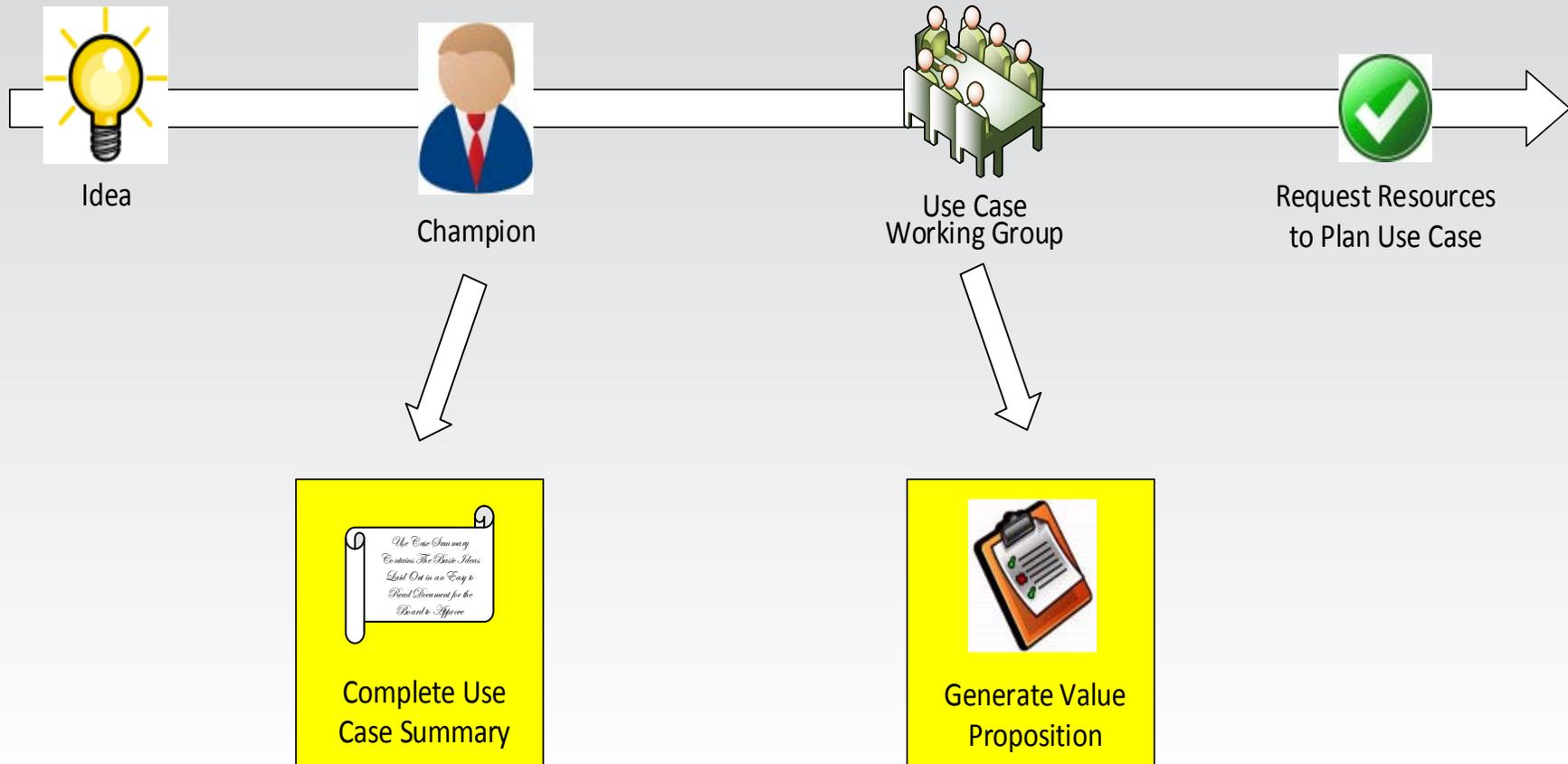
Use Case Factory



<http://mihin.org/about-mihin/resources/use-case-submission-form/>



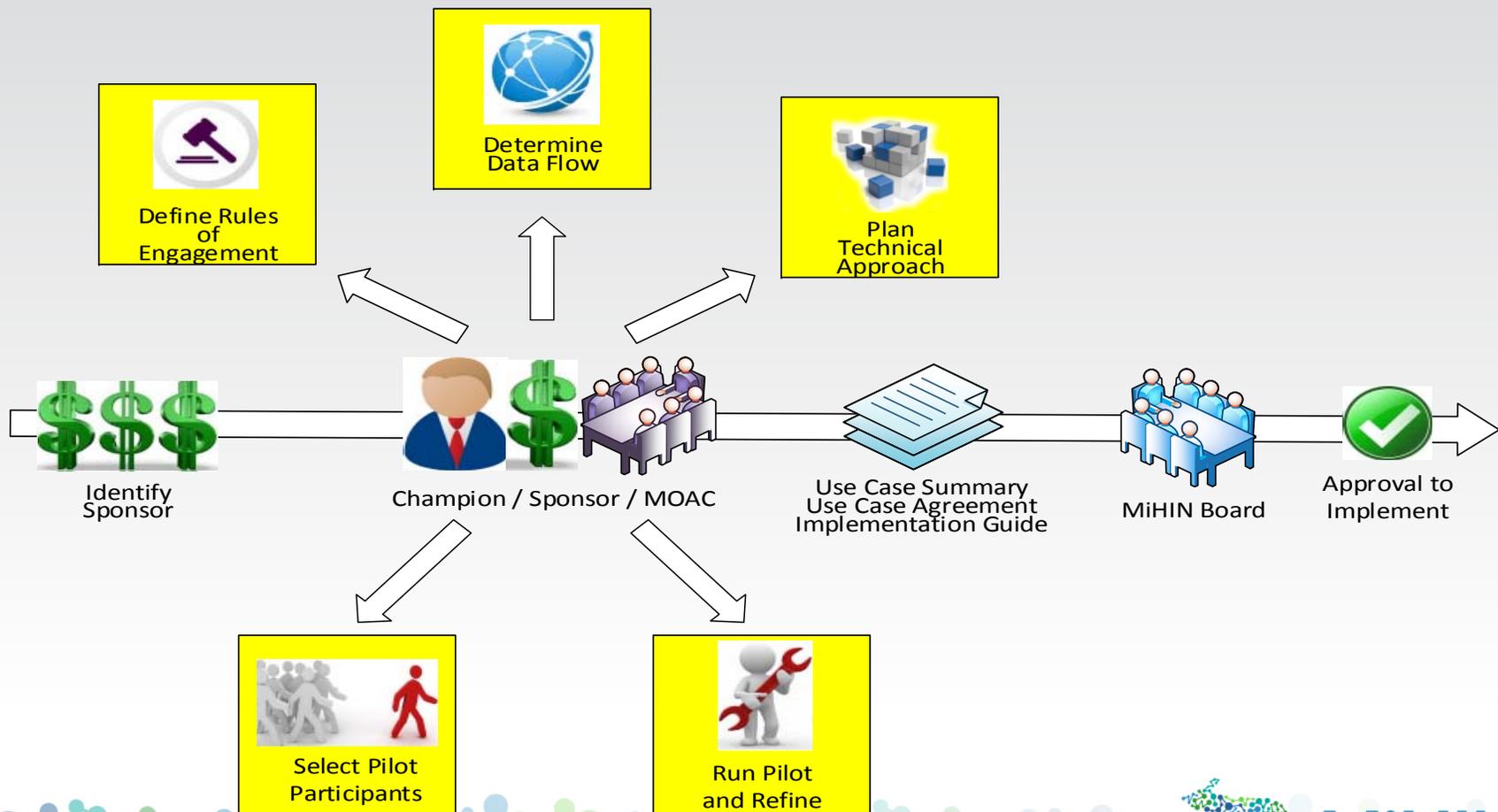
Conceptual Stages



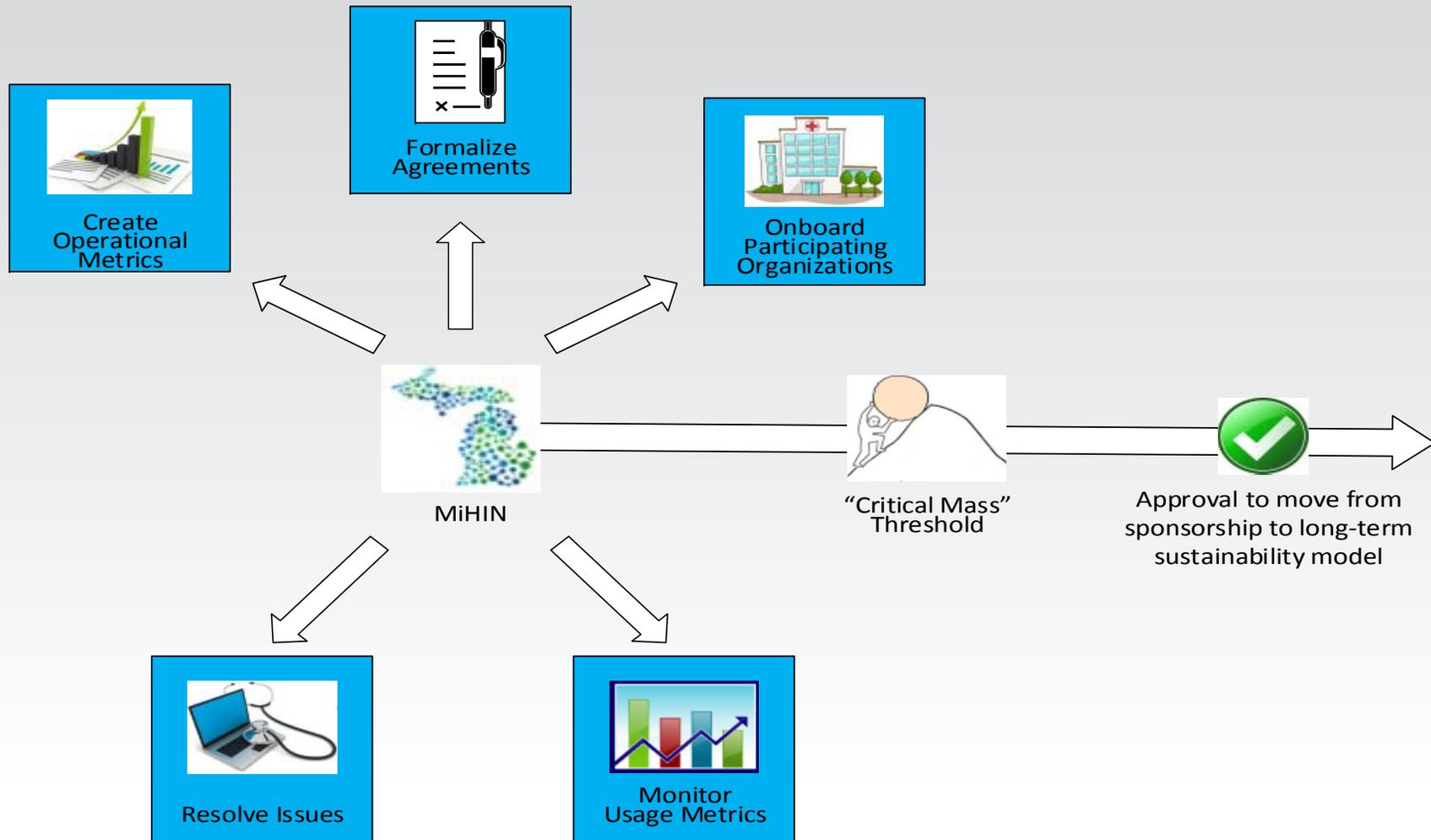
<http://mihin.org/about-mihin/resources/use-case-submission-form/>



Planning and Development Stages



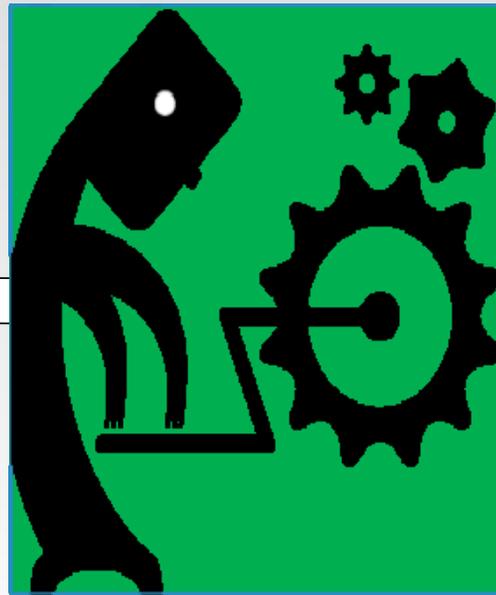
Implementation Stages



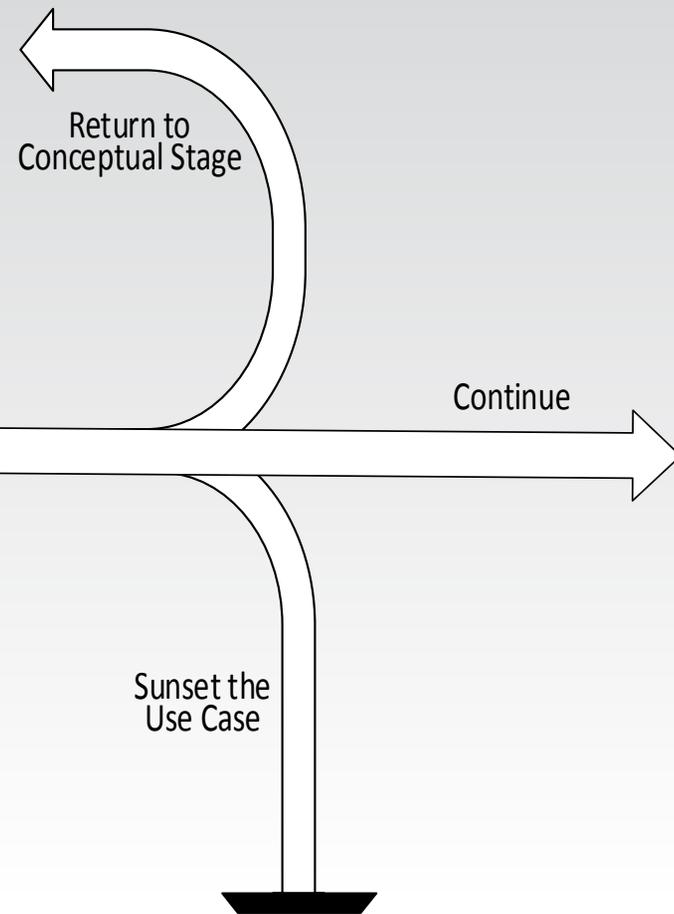
Adoption Stages



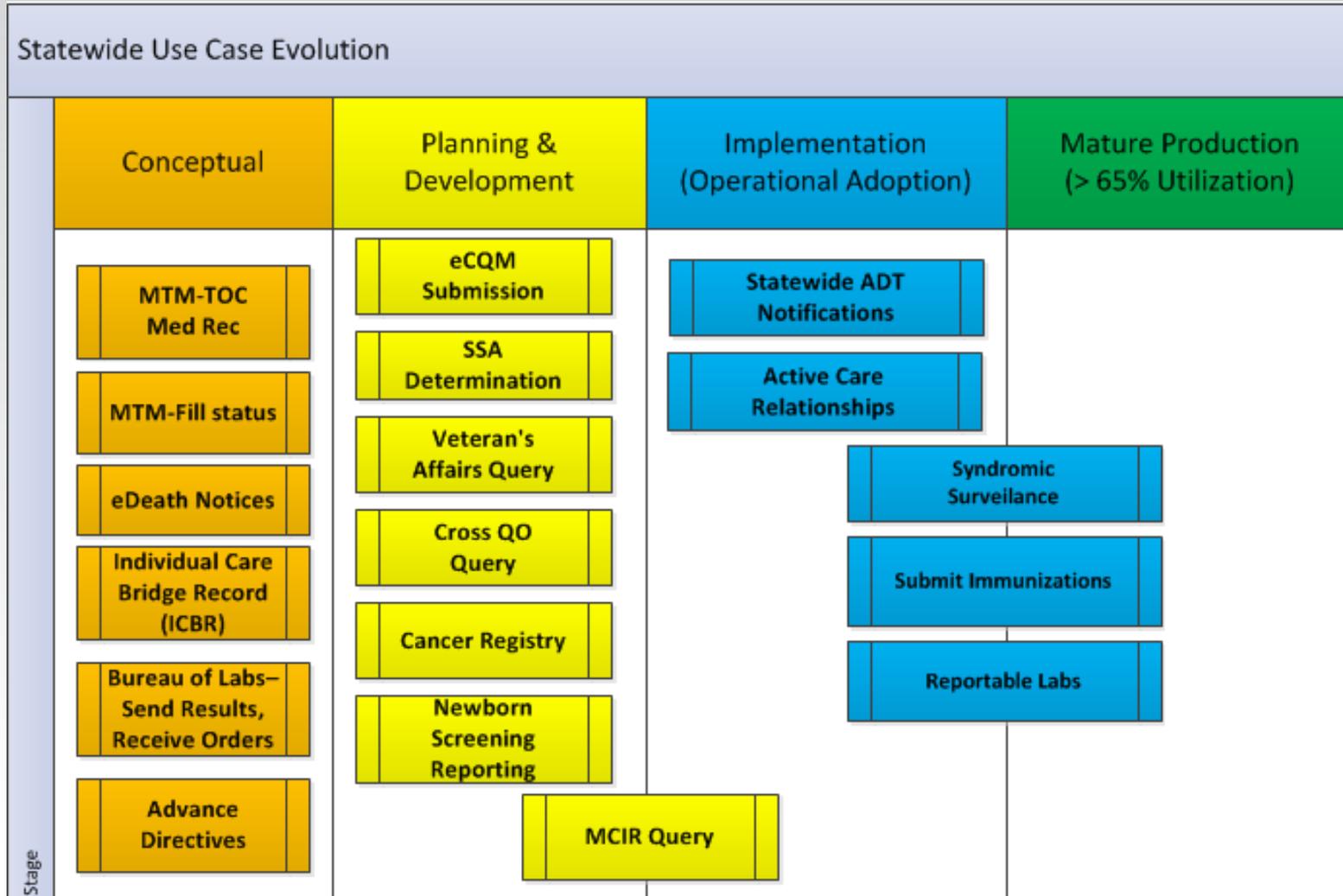
Mass Marketing



Functional Data-Sharing Widget



Examples of Use Case Evolution

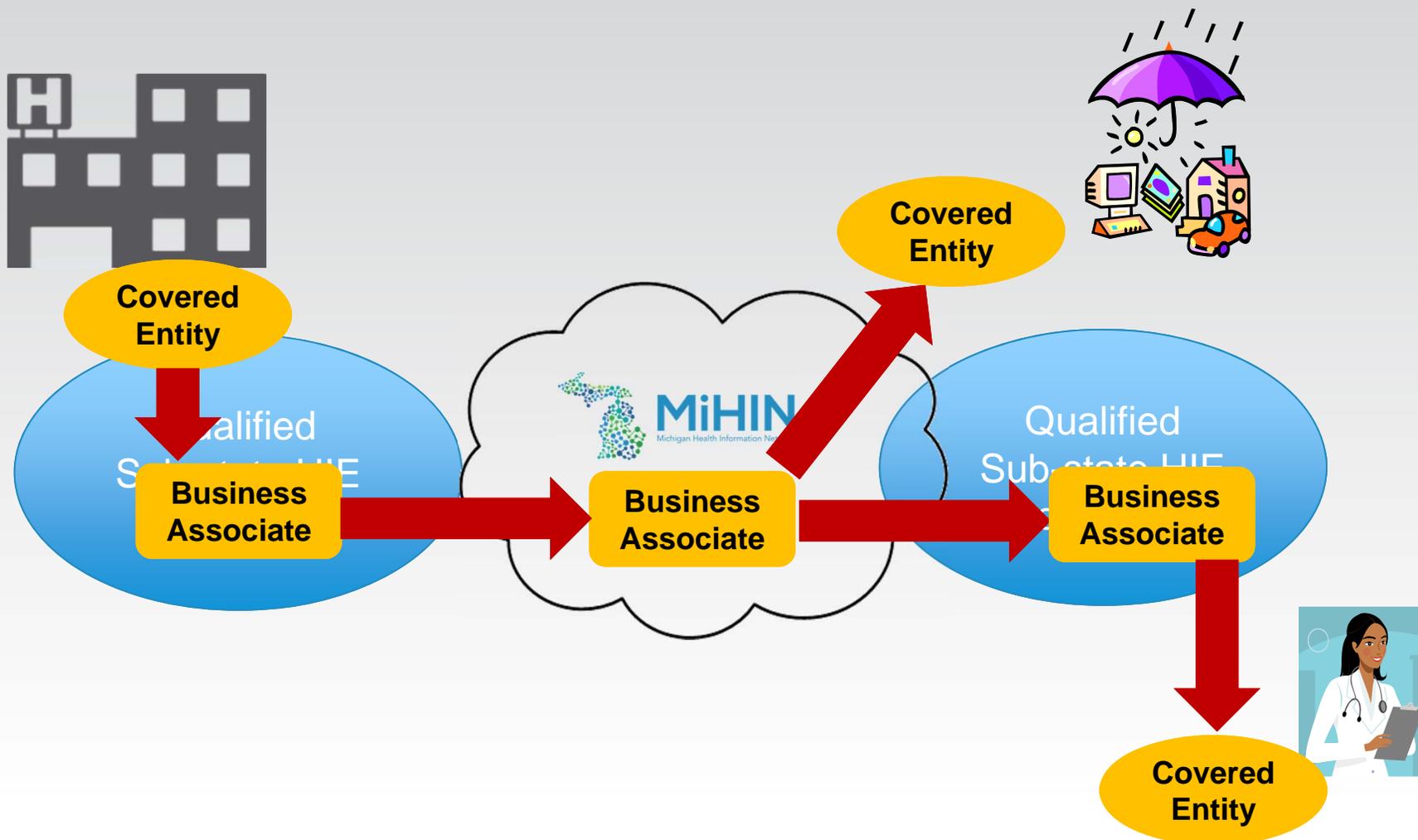


Benefits of the Use Case Approach

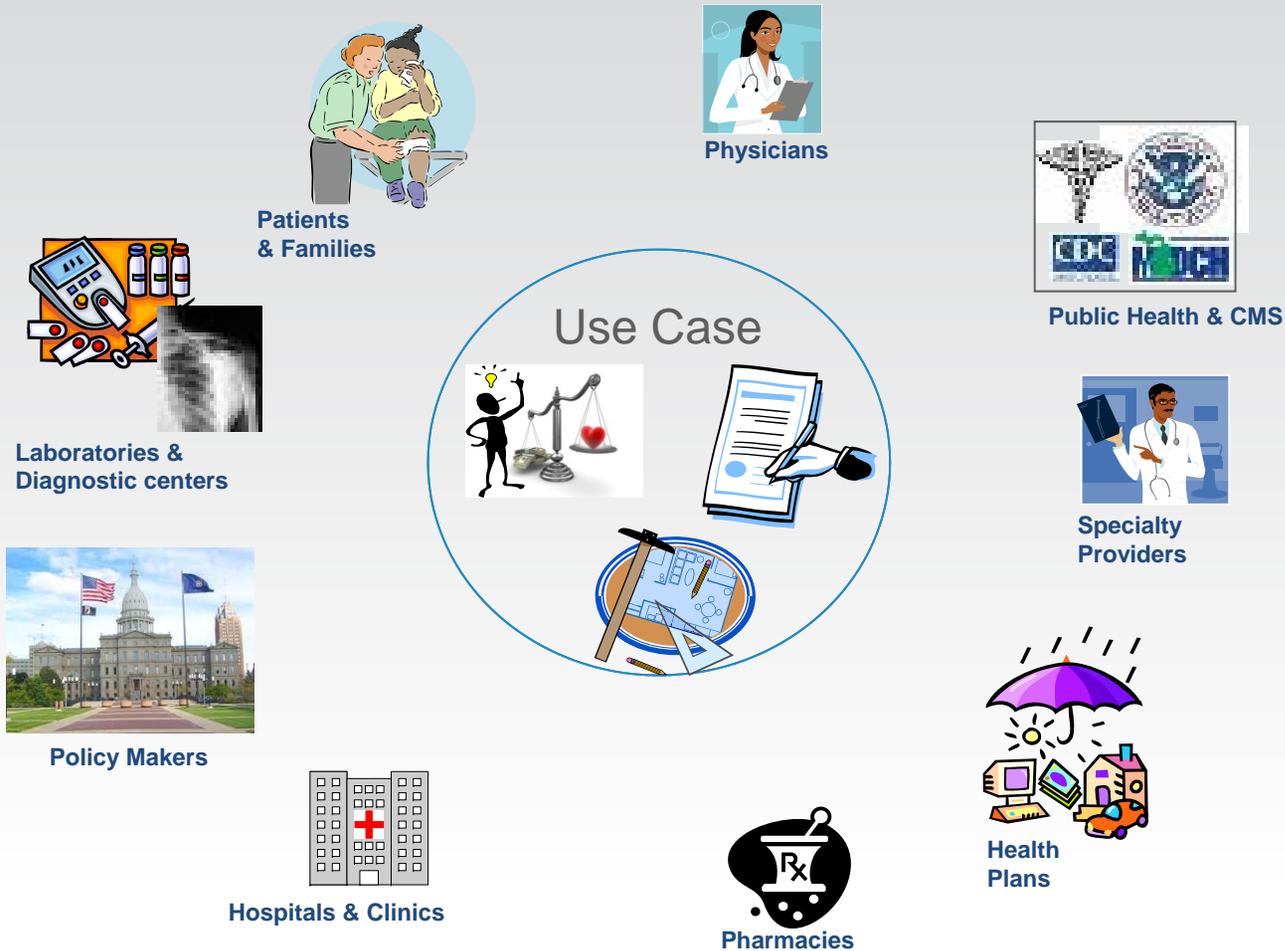
- Allows the VERY complex world of data sharing to be broken into manageable chunks
- Consistent mechanism for bounding purpose, technical requirements, costs, and limits on how data is used
- Use Cases can be added together to create higher levels of functionality
 - e.g. ADT notifications followed by a Medication Reconciliation
- Regulatory or policy requirements can articulate specific Use Case adoption
- Population health financial incentives can be require specific Use Case implementation
- Establishes a common chain of trust across organizational boundaries
- Provides transparency to constituents in Michigan about data use & focused monitoring



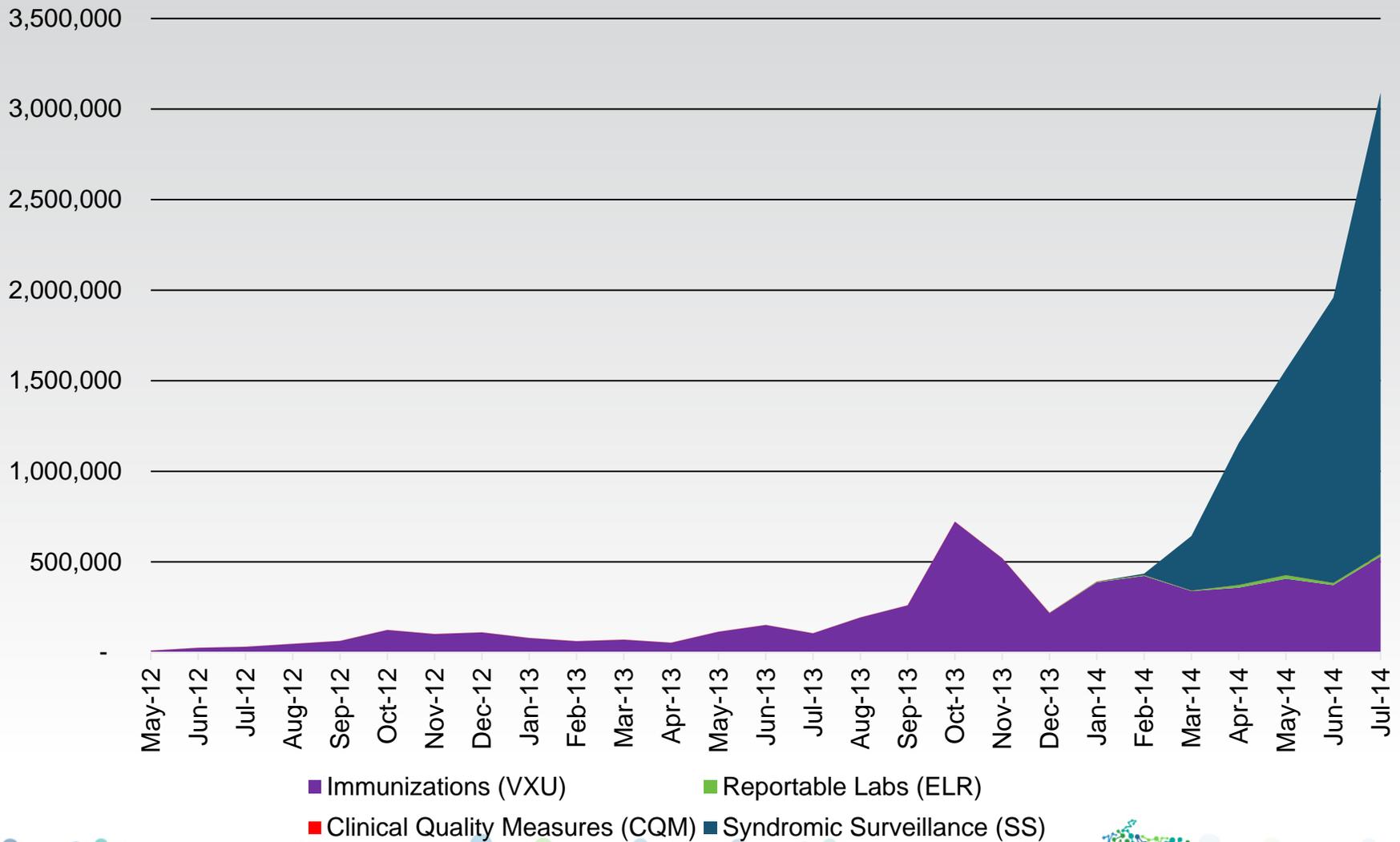
Chain of Trust



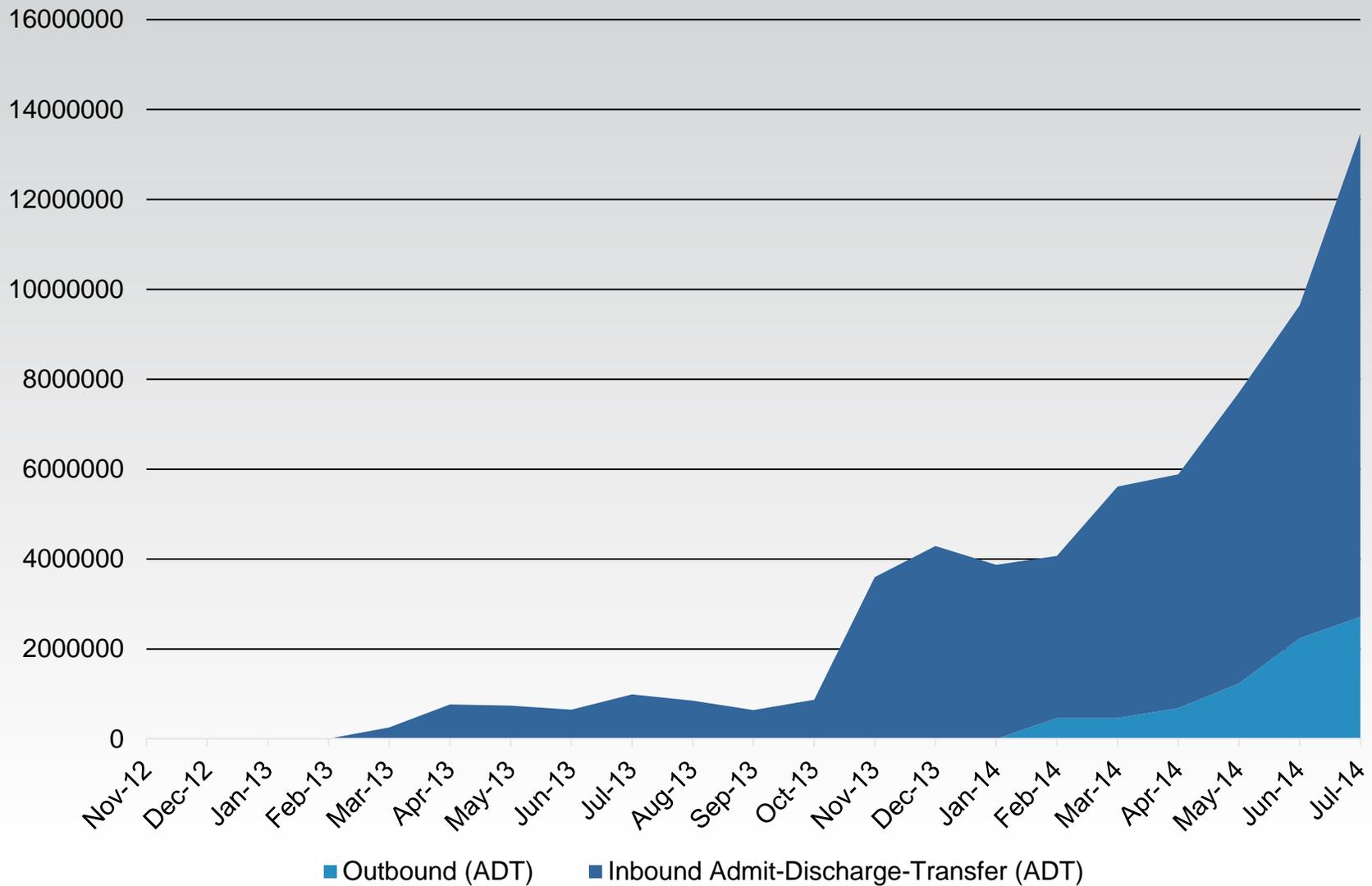
Constituent Transparency



Monitoring Public Health Use Case



Monitoring Transition of Care



Questions?

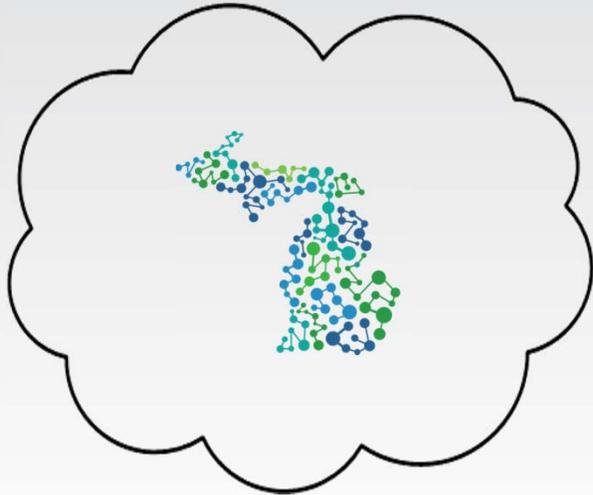
Dr. Tim Pletcher
Executive Director
pletcher@mihin.org

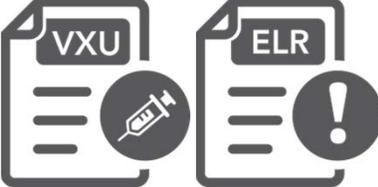


Additional Information



Existing Functionality



	Public Health Reporting	 PRODUCTION
	Health Provider Directory	 PRODUCTION
	Push Alerts & Notification	 PRODUCTION
	Pull/Query Care Summaries	 CERTIFIED EHEALTH EXCHANGE NODE!!



Vaccination Reporting

 **Public Health Reporting**



HIE
(QOs, VQOs or sub-state HIEs)

 State-wide Shared Services


MDCH Data Hub



Electronic Service Information (ESI)

“Information for delivering PHI by secure electronic means”

- Examples:
 - Direct Secure Messaging (secure email) id:
“thomas_simmer@direct.bcbsm.com”
 - IHE/EHR routing info for an EHR to receive HL7:
“data.hfhs.org:22356”
 - Future forms of ESI are being defined:
 - Patient preferences for where their PHI is stored (e.g. PHR)
 - Other federally defined forms of ESI (e.g. VA, SSA)



Health Provider Directory

- Contains Electronic Service Information (ESI) used to route information to providers
- Flexibility to maintain multiple distribution points for single provider or single distribution for organization
- Manages organizations, providers and the multiple relationships between them

Organization: Windward General Hospital ~ MIHIN HPD Portal

mihin.secure.force.com/customer/001F000000qOicb

Edition iGoogle HPD Portal HPD Administrator Organization... HPD Portal

Organization Specialties					New Organization Specialty
Action	Specialty Name	As of Date	Expiration Date	Description	
Edit Del	Diabetes	1/1/2013		Diabetes	
Edit Del	Diabetes Educator	1/1/2013		Definition to come...	
Edit Del	Surgery	4/1/2013		A general surgeon has expertise related to the diagnosis - preoperative, operative and postoperative management - and management of complications of surgical conditions in the following areas: alimentary tract; abdomen; breast, skin and soft tissue; endo...	

Organization Services								New Organization Service
Action	Organization Service: Name	Type	Protocol	Payload	Address	TOC Destination?	Preferred Types	
Edit Del	OS-0001	Direct	SMTP	CCD*PDF	main@direct.windward.com			
Edit Del	OS-0002	EHR Repository	LLP	HL-7	data.windward.com:22356	<input checked="" type="checkbox"/>	A01; A02; A03; A04; A06; A07; A13; A14; A21; A22; A23; A25; A26; A27; A28; A29; A31; A32; CCD; REF	

Providers									New Provider
Action	Contact Name	Contact Record Type	NPI	DIRECT Email	Email	Phone	Specialties	Gender	Languages
Edit	Barbara Watkins	Provider		barbara.watkins@direct.windward.com				Female	English; Spanish
Edit	Cindy Gingrich	Provider			gingrich@mihin.org	(415) 298-0023		Female	English
Edit	Dan Weikart	Provider			weikart@mihin.org	(415) 298-0023		Male	English
Edit	George Duong	Provider		george.duong@direct.windward.com				Male	English; Malayalam
Edit	Jeff (Org Admin1) Eastman	Provider		jeff.eastman@direct.mihin.org	jeastman@windwardsolutions.com				

Show 5 more » | Go to list (12) »

Affiliated Providers						New Affiliation
Action	Affiliation ID	Provider	Type	Start Date	End Date	
Edit Del	AF-1000	Geoffrey Ford	Practices In			
Edit Del	AF-1003	Richard Eastman	Practices In	1/1/2013		
Edit Del	AF-1008	Jeff (Provider) Eastman	Employed By	1/14/2013	1/18/2013	
Edit Del	AF-101247	Judy Francis	Has Admitting Privileges In			

Care Teams			New Care Team
Action	Care Team Name	Electronic Service URI	



ACRS™ Update – Version 1.0

Patient Information

Source Patient ID
First Name
Middle Initial
Last Name
Suffix
Date of Birth
Gender
SSN – Last 4 digits
Address 1 & Address 2
City, State, Zip
Home & Mobile Phones

Physician Information

NPI
First Name
Last Name
Practice Unit ID
Practice Unit Name
Physician Organization ID
Physician Org Name

Additional patient information to minimize *False Positives*



Important Horizontal View



Eligible Providers & PCMH



Eligible Hospitals



Critical Access Hospitals



Behavioral Health Specialists



Specialty Providers



Care Coordinators



Patients & Families

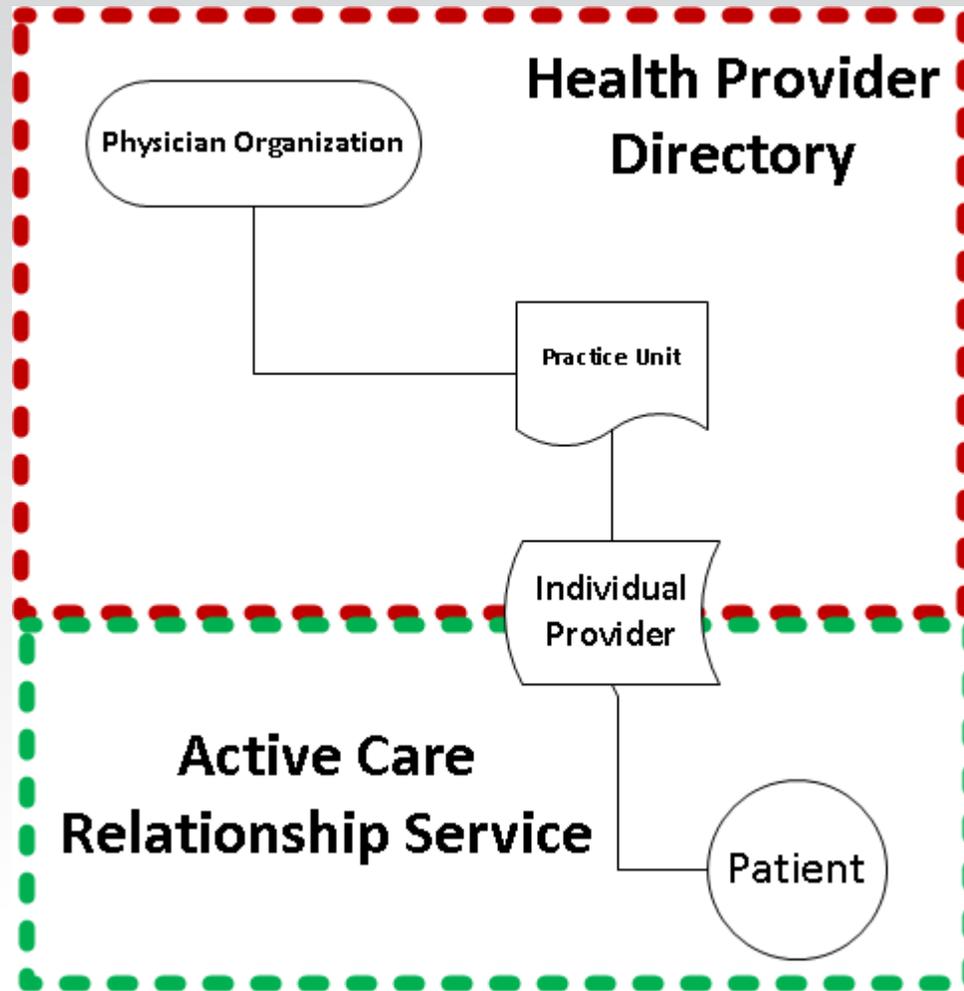


Use Cases using ACRS

- Transitions of Care:
 - Admit-Discharge-Transfer (ADT)
 - Medication Reconciliation
- Fill status on medications
- Care plan changes
- Death notifications
- Health risk appraisal availability
- Other alerts (TBD)



Robust Reporting Hierarchy

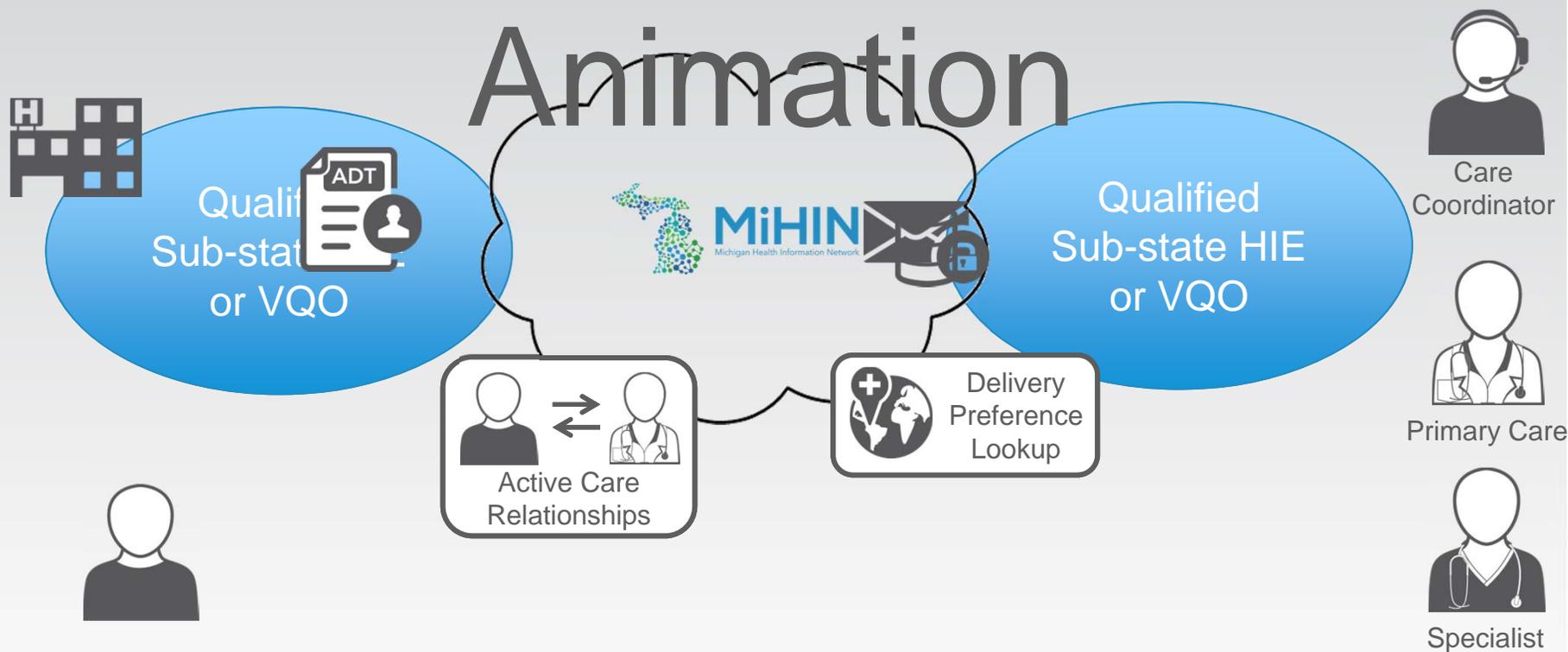


Type of Relationships

- Declared by Provider
- Declared by Patient
- Assigned or derived by a health plan algorithm
- Reported on claim, performance report, or Meaningful Use Stage 2 Clinical Quality Measures
- *Contested by provider*
- *Contested by patient*



Statewide ADT Notification



- 1) Patient goes to the hospital, hospital sends a registration message
- 2) Check Active Care Relationships and identify three providers
- 3) Using the HPD, identify delivery preference for each provider
- 4) Notification is routed to providers based on preferences

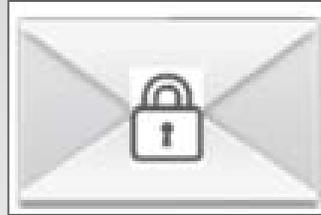


The Direct Project

- Simple, secure, scalable, standards-based way to send encrypted information “directly” to known, authenticated, trusted recipients
- Messages sent securely between end-points:
 - person to person
 - person to system
 - system to system
 - system to person



What is a Direct message?

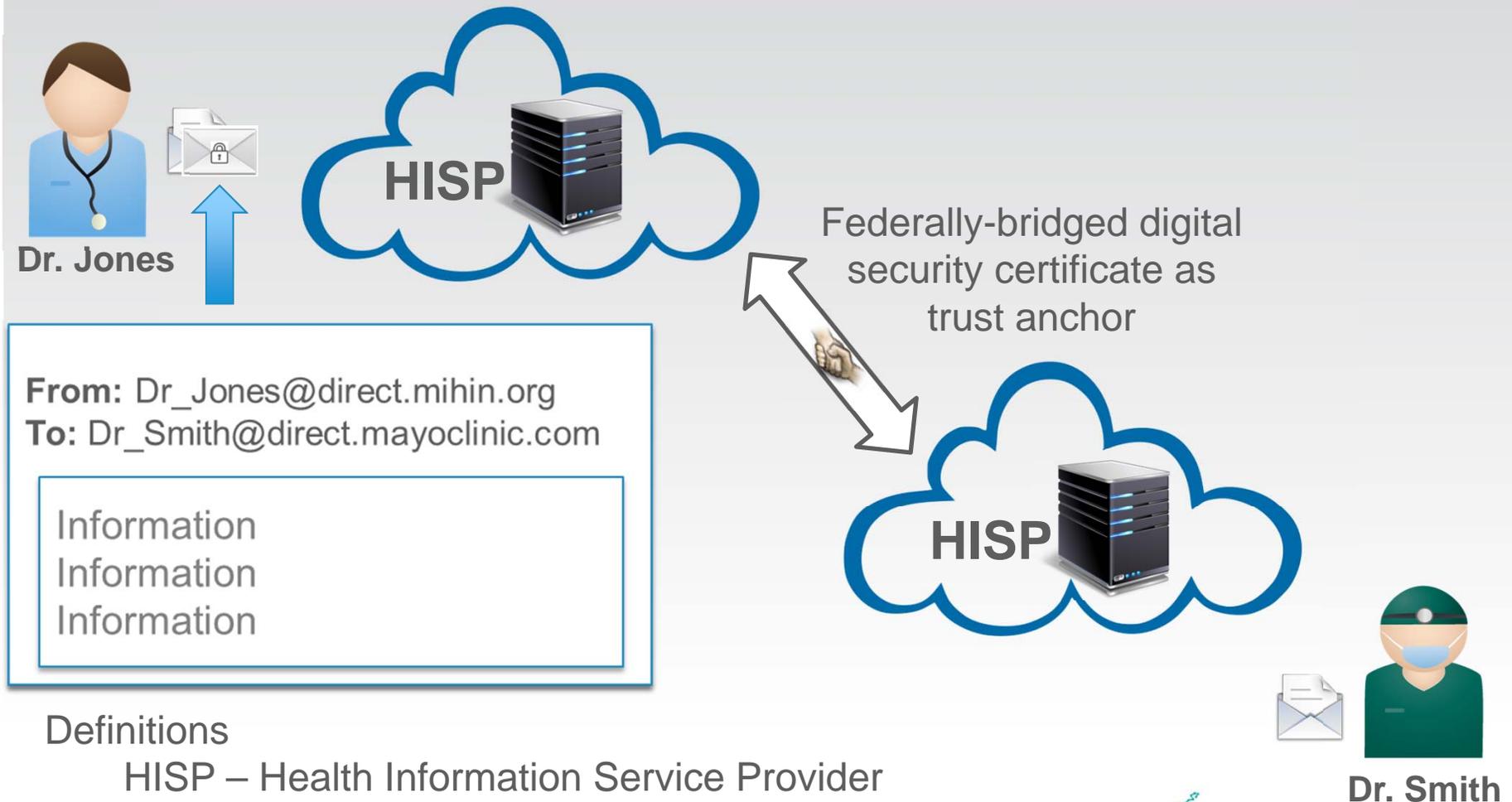


Direct = secure SMTP

Simple Mail Transfer Protocol

NOTE: The DIRECT specification also calls for something called IHE-based XDR/XDM support which is not treated here

Provider to Provider Email



Definitions

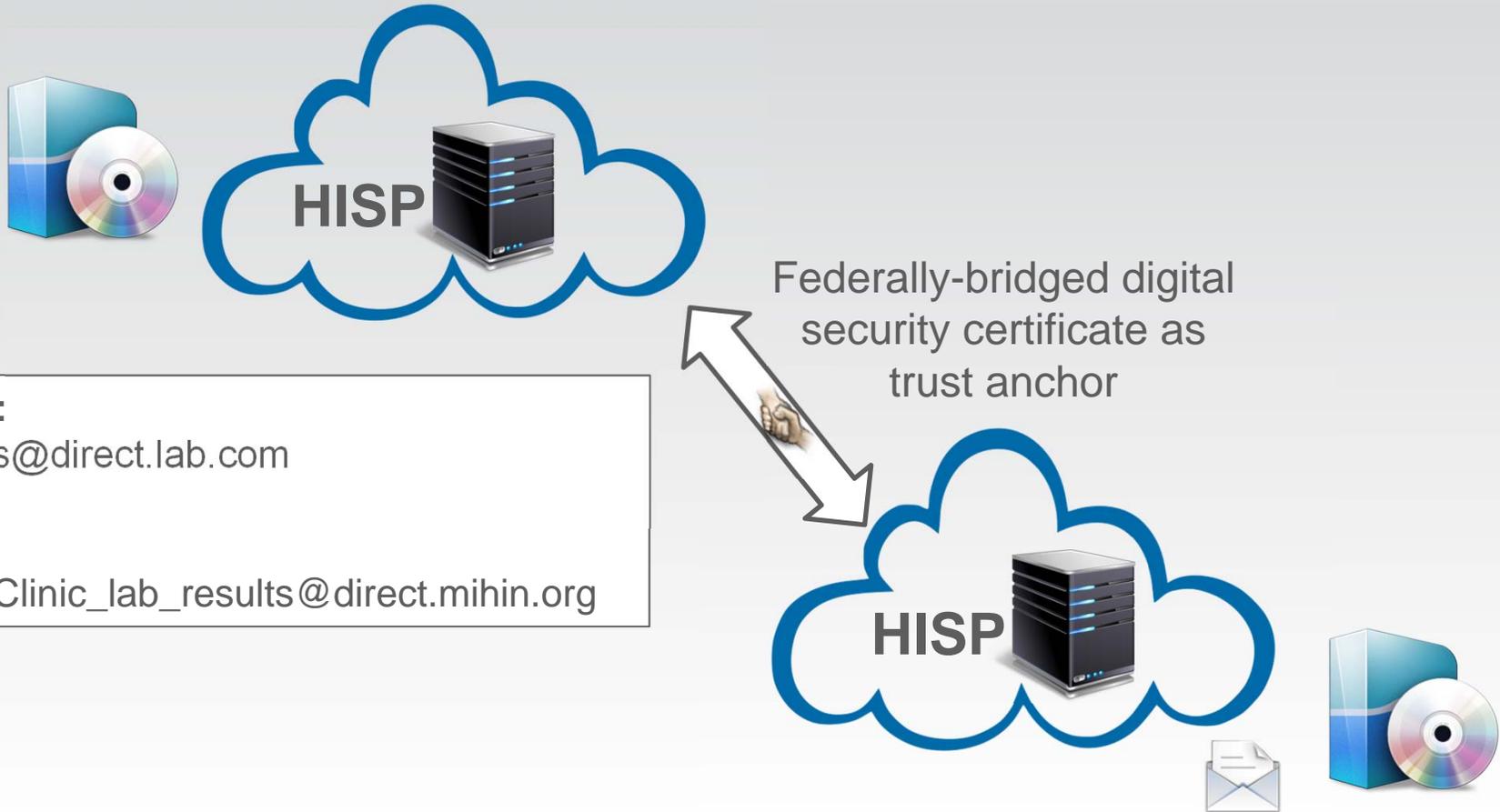
HISP – Health Information Service Provider

MU 2 Final Rule & DIRECT

- “These transport standards include the two transport specifications developed under the Direct Project⁶: (1) Applicability Statement for Secure Health Transport⁷ and (2) External Data Representation (XDR) and Cross- Enterprise Document Media Interchange (XDM) for Direct Messaging⁸. The Applicability Statement for Secure Health Transport specification describes how electronic health information can be securely transported using simple mail transport protocol (SMTP), Secure/ Multipurpose Internet Mail Extensions (S/MIME), and X.509 certificates. The XDR and XDM for Direct Messaging specification describes the use of XDR”
- See:
 - 6 <http://wiki.directproject.org/Documentation+Library>
 - 7 <http://wiki.directproject.org/Applicability+Statement+for+Secure+Health+Transport>
 - 8 <http://wiki.directproject.org/XDR+and+XDM+for+Direct+Messaging>



System-to-system messaging



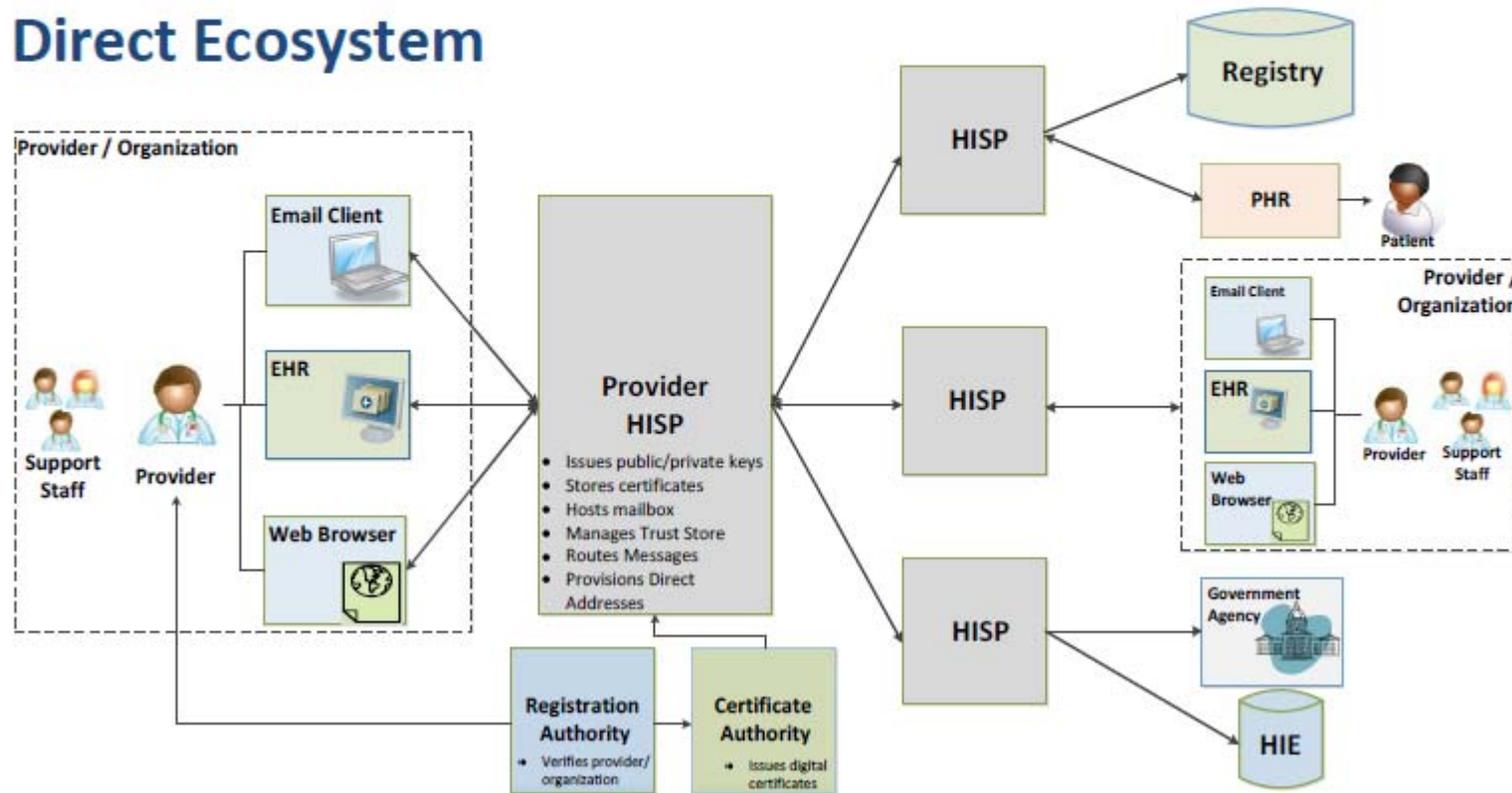
Definitions

HISP – Health Information Service Provider

The Role of DIRECT & EHRs

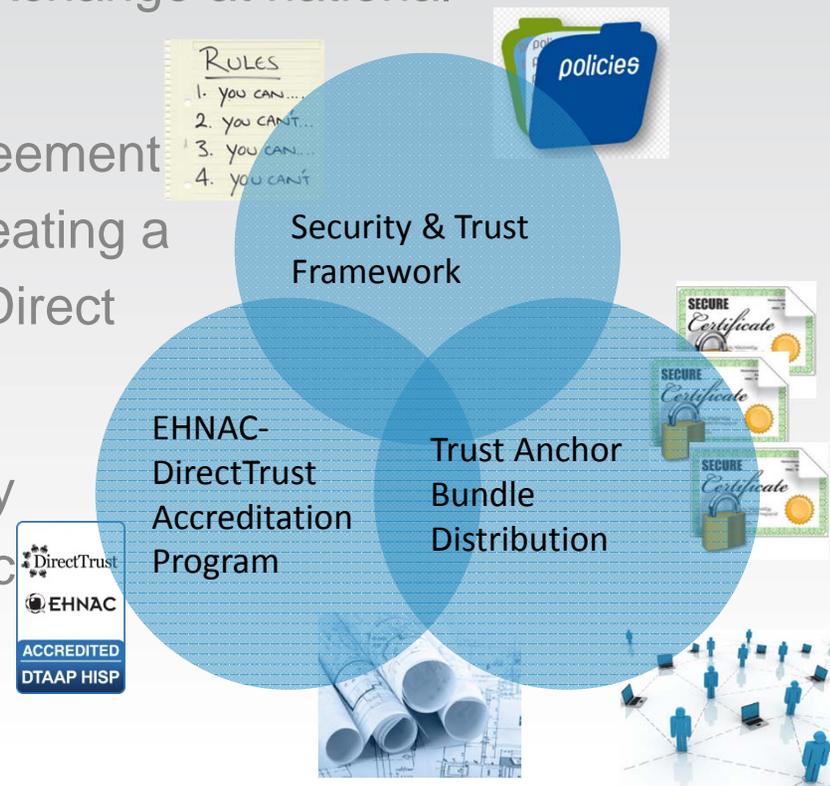
The Office of the National Coordinator for Health Information Technology

Direct Ecosystem



Mission and Goals: DirectTrust

- A voluntary, self-governing, non-profit trade alliance
- Dedicated to the growth of Direct exchange at national scale
- Operates under a Cooperative Agreement with ONC to support its work of creating a national network of interoperable Direct exchange services providers.
- Establishes policies, interoperability requirements, and business practice requirements



©Cartoonbank.com



"Before DirectTrust.org, no one knew I was a dog."

DirectTrust Members



Current DTAAP Accreditation Roster

January 15, 2014

Fully Accredited and Audited

- CareAccord
- Cerner Corporation
- DigiCert
- Infomedtrix
- ICA
- Inpriva
- MaxMD
- Surescripts
- MedAllies
- DataMotion

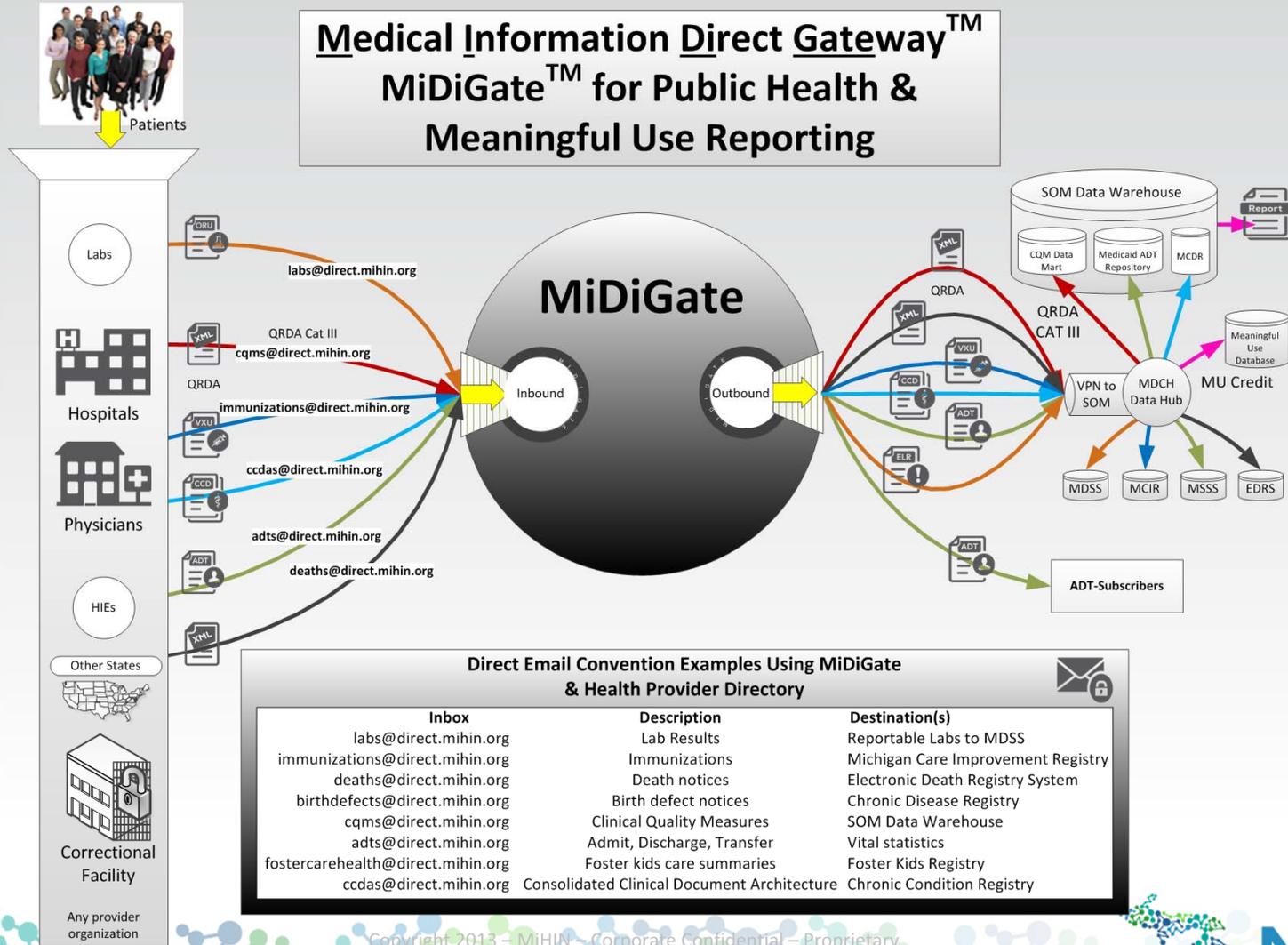


Candidate Status

- Applied Research Works, Inc.
- Athenahealth
- Covisint
- EMR Direct
- GlobalSign, Inc.
- HIXNy
- Health Companion
- Health Connection CNY
- Health Info EXchange of NY
- iMedicor
- IOD Inc.
- Medicity
- NYeC
- RelayHealth
- Rochester RHIO
- Secure Exchange Solutions
- Simplicity Health Systems
- Truven Health Analytics
- Updox
- Utah Health Information Network
- Vitalz, Inc.
- West Virginia HIN

HIE QO & VQO

Medical Information Direct Gateway™ MiDiGate™ for Public Health & Meaningful Use Reporting



Direct Email Convention Examples Using MiDiGate & Health Provider Directory

Inbox	Description	Destination(s)
labs@direct.mihin.org	Lab Results	Reportable Labs to MDSS
immunizations@direct.mihin.org	Immunizations	Michigan Care Improvement Registry
deaths@direct.mihin.org	Death notices	Electronic Death Registry System
birthdefects@direct.mihin.org	Birth defect notices	Chronic Disease Registry
cqms@direct.mihin.org	Clinical Quality Measures	SOM Data Warehouse
adts@direct.mihin.org	Admit, Discharge, Transfer	Vital statistics
fostercarehealth@direct.mihin.org	Foster kids care summaries	Foster Kids Registry
ccdas@direct.mihin.org	Consolidated Clinical Document Architecture	Chronic Condition Registry

Copyright 2013 – MiHIN – Corporate Confidential – Proprietary

Patent Pending
Corporate Confidential – All Rights Reserved 2014 - Michigan Health
Information Network Shared Services



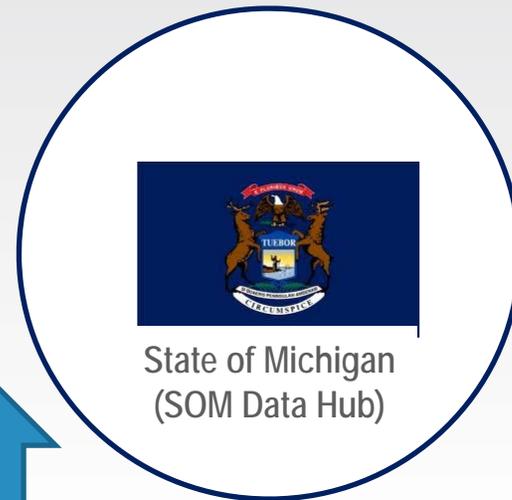
Public Health Use Case: Vaccinations Using DIRECT



VACCINATIONS



mcir@direct.mihin.org



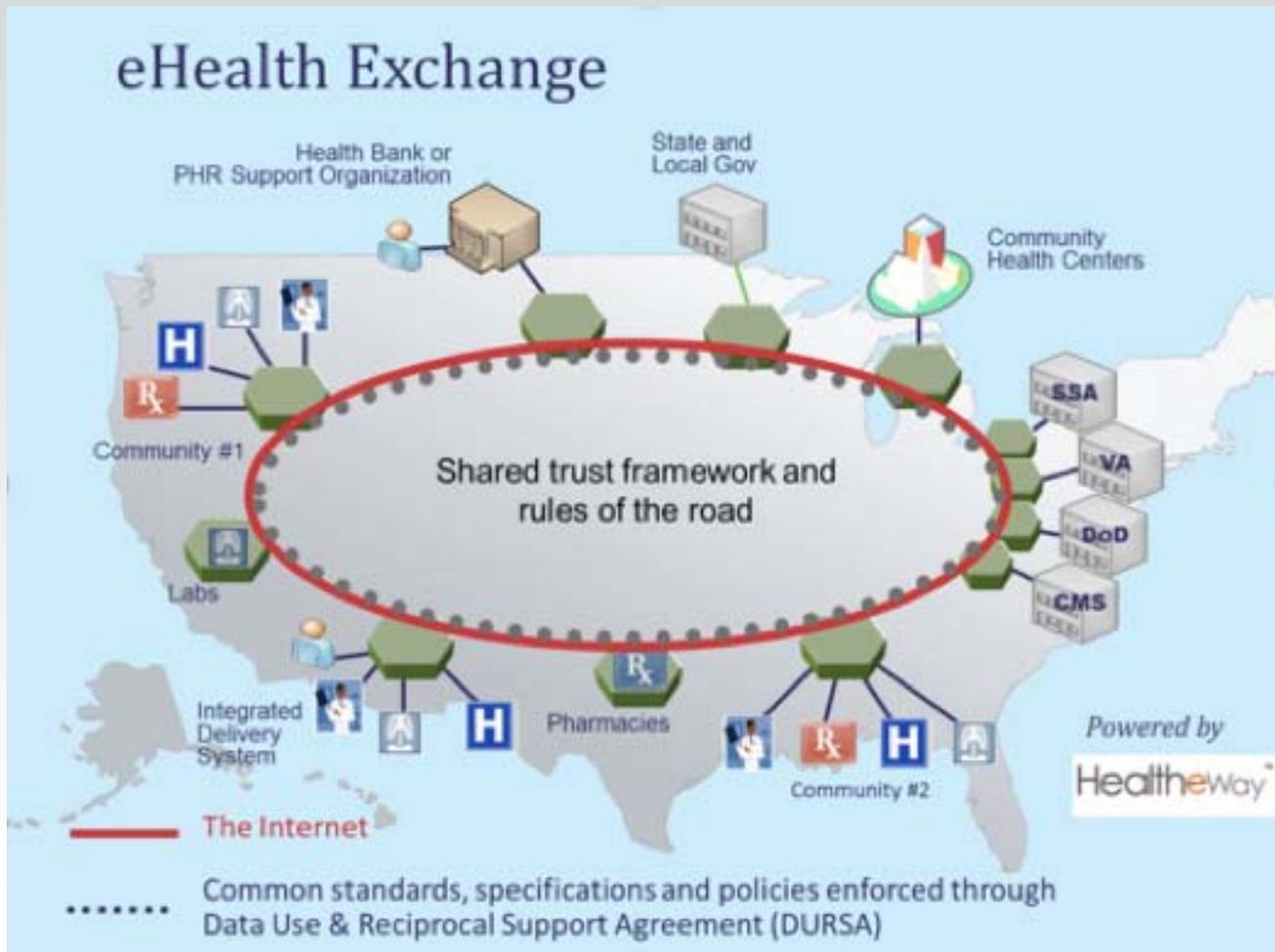
**No Change
Required!**



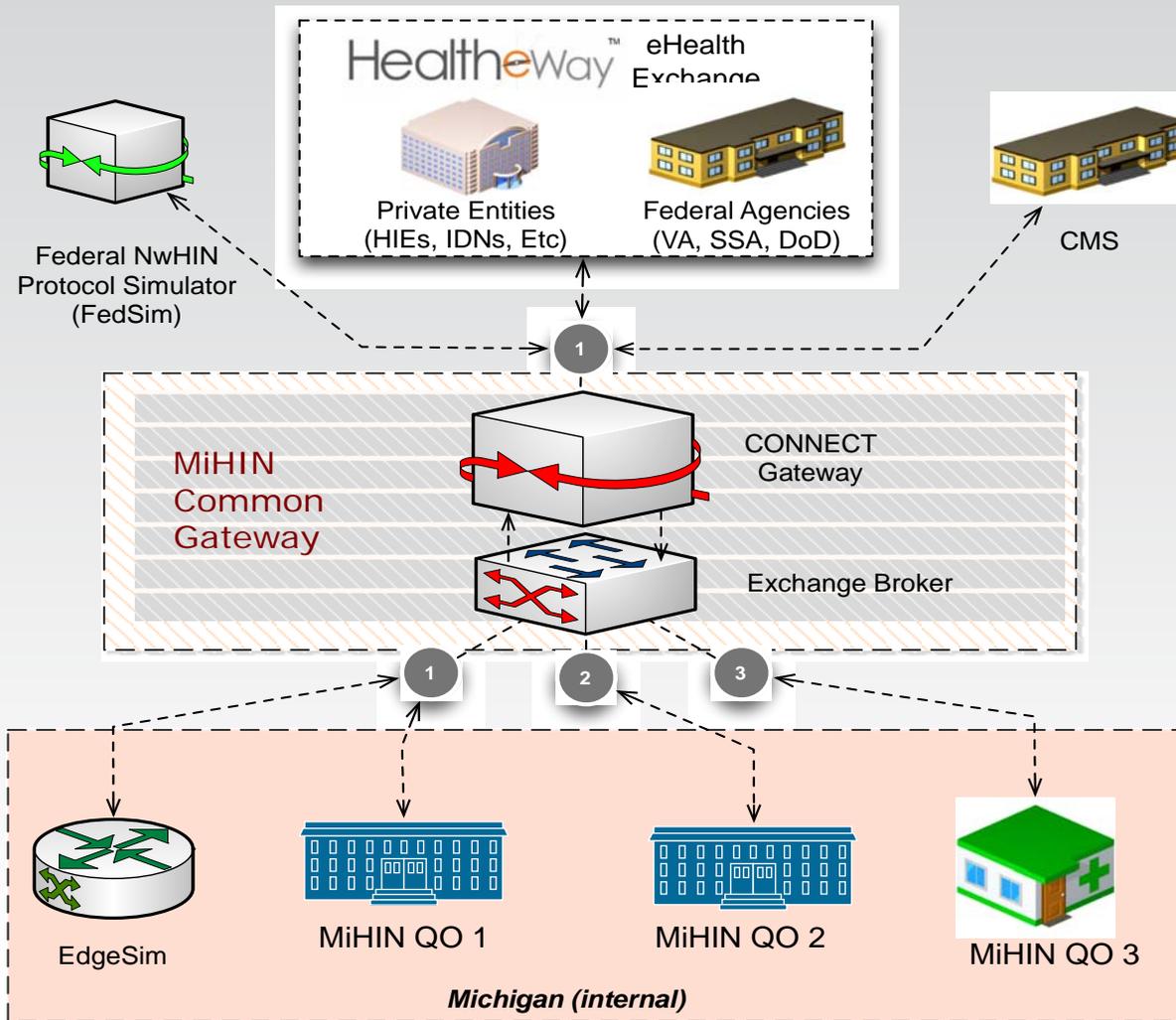
The eHealth Exchange



Pull/Query
Care Summaries



MiHIN Common Gateway



Pull/Query Infrastructure

Registry



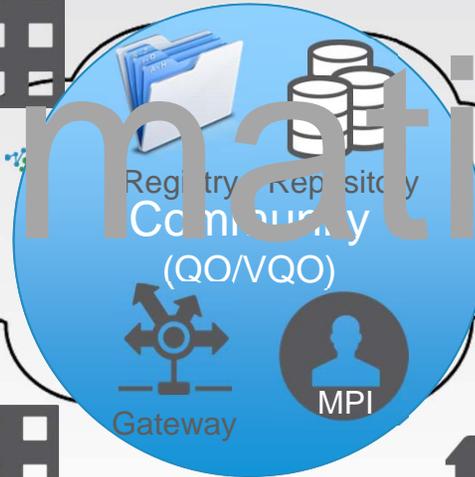
Repository



Building the State-wide Record Locator Service



Animation



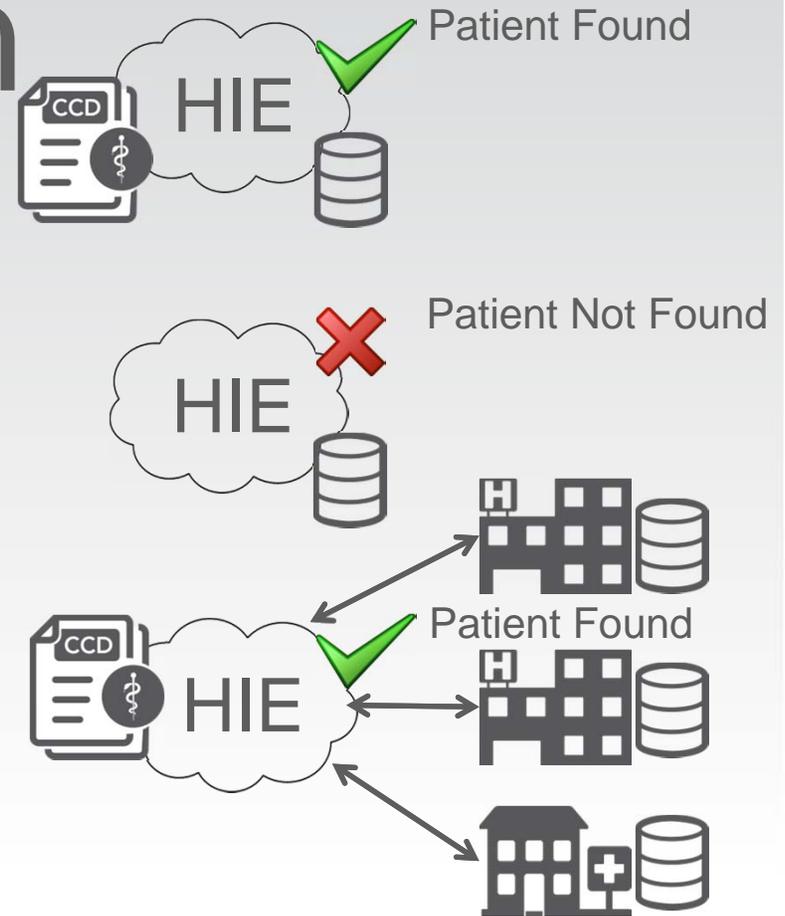
Query for Patient History



Animation



- 1) Doctor see's a new patient in the Emergency Department (ED)
- 2) ED sends out a "patient discovery" request for information about the patient
- 3) Sources that know the patient respond
- 4) ED queries for patient clinical information
- 5) Sources respond with clinical document(s), typically CCDs



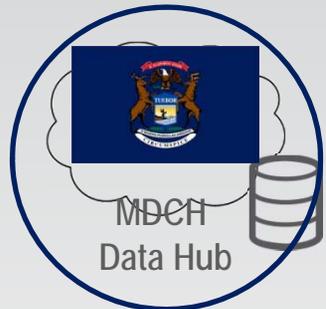
Query for Patient History



Animation

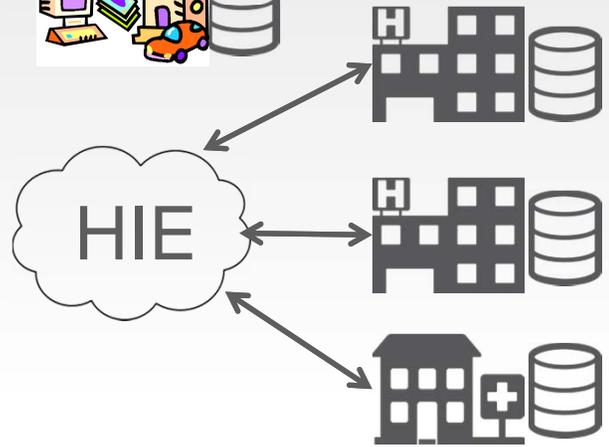


Way



HE

Way



- Requester can be in many settings
 - Primary care provider
 - Health plan doing electronic determination
 - Out-of-state provider
 - Federal agencies
- Responders can vary as well
 - State of Michigan
 - Federal agencies and out-of-state providers



Michigan Cancer Surveillance and Birth Defects Program

Glenn Copeland
MDCH



Michigan Cancer and Birth Defects Surveillance Programs



IMPROVING REPORTING
AND
SUPPORTING MEANINGFUL USE



Michigan eReporting Projects

71

Cancer

- Funding
- Case definition
- Message content
- Triggers
- Interoperability Guide
- Declare
- Transport
- Validation
- Piloting

MU
Stage 2
Menu
Item

Birth Defects

- Funding
- Case definition
- Message content
- Triggers
- Interoperability Guide
- Declare
- Transport
- Validation
- Piloting

Meets MU
Specialized
Registry
Objective

Goals

72

Increase completeness and data quality

Increase timeliness and efficiency of reporting

Pilot interoperability with EHRs

Help Eligible Professionals Achieve MU

MCSP Overview

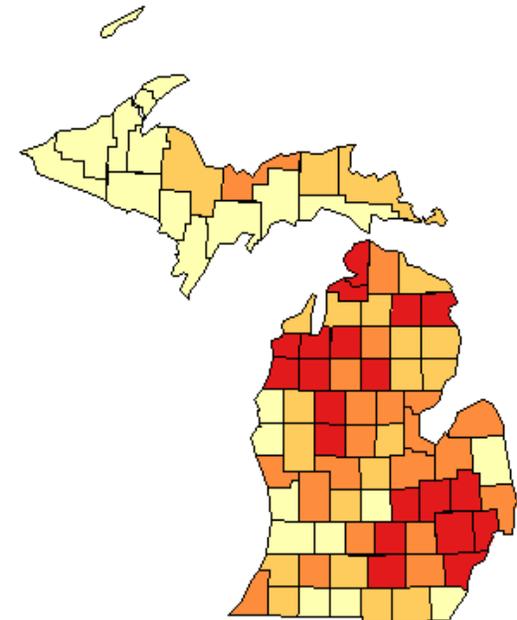
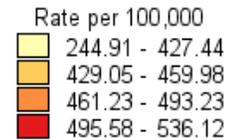
73

- Statewide population-based cancer registry established by state law in 1984
- January 1, 1985, the rules for reporting cancer cases went into effect
- Data is used for surveillance and the development of cancer control programs and health care planning and interventions
- Required by law for all physicians, hospitals, laboratories and dentist to report cancer cases

Age-Adjusted Invasive Cancer Incidence Rates in Michigan All Sites, 2007-2011 By County

Age-Adjusted to the 2000 U.S. Standard Million Population

Michigan Rate: 486.68



Data accessed April 2, 2014.
Based on data released November 30, 2013.
Copyright (C) 2014 Michigan Cancer Surveillance Program

Cases Included



- **In situ or invasive malignancies other than basal or squamous nongenital skin**
 - *Includes in situ cervical cancer*
- **Benign brain and CNS tumors**

Twenty-Seven Years of Surveillance Data

75

- Covers the State of Michigan
- Population-based
- 1.3 million patients
- 1.5 million tumors
- Geocoded pop-based data
- Complete for 1985-2011
- Facilitated 117 research protocols

Confidentiality

76

- **Protected by Law and Rule**
 - MCL 333.2631 – Rule 325.9054
- **HIPAA Public Health Exemption**
 - Privacy Rule - 45 CFR 164.512(a)
- **Access to Identifiable Data Restricted**
 - Patient
 - Researchers
 - ✦ IRB
 - ✦ Scientific Advisory Panel
 - ✦ DCH Director

Source of Reports

77

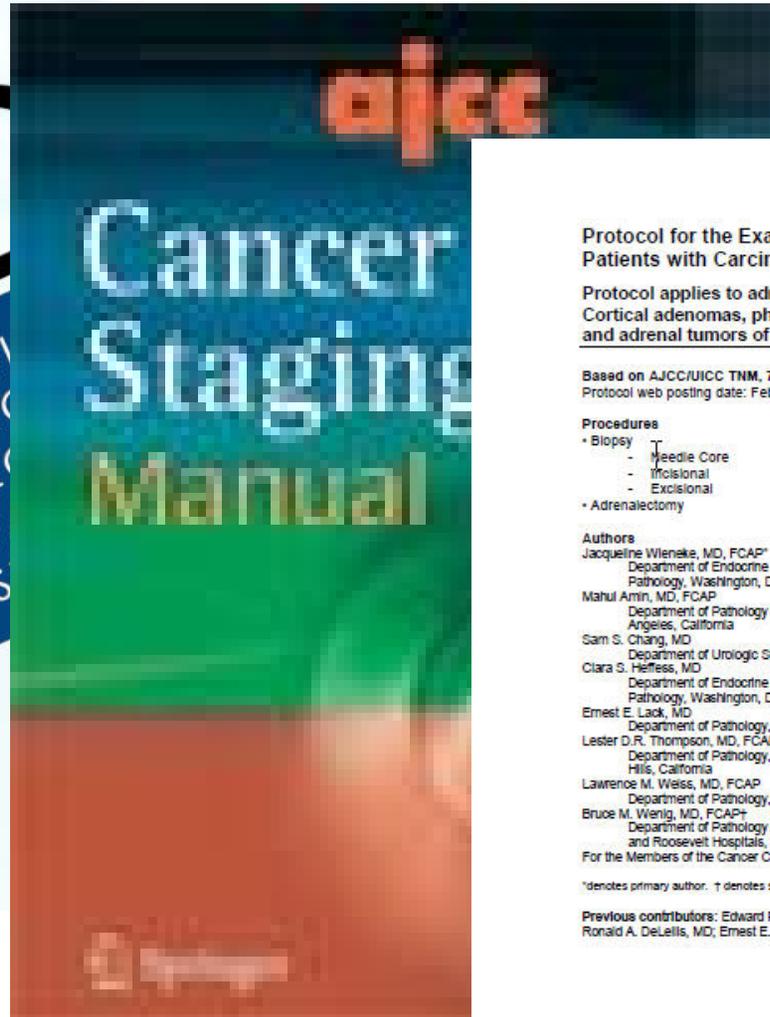
- **Hospitals and Laboratories**
 - Rule 325.9052
- **Physicians, Dentists, Clinics**
 - Rule 325.971
- **Other State Registries**
 - Resident exchange with 23 states
- **Death Certificates**
 - Important source

Cancer Surveillance Standards

79

- American College of Surgeons
 - Commission on Cancer
- American Joint Commission on Cancer
- College of American Pathologists
- World Health Organization
 - International Agency for Research on Cancer
- National Cancer Institute
- National Program of Cancer Registries
- National Cancer Registrars Association
- North American Association of Central Cancer Registries

...and relies on reporters to follow professional standards



Protocol for the Examination of Specimens from Patients with Carcinoma of the Adrenal Gland

Protocol applies to adrenal cortical carcinoma only. Cortical adenomas, pheochromocytoma, neuroblastic tumors, and adrenal tumors of childhood are not included.

Based on AJCC/UICC TNM, 7th edition
Protocol web posting date: February 1, 2011

Procedures

- Biopsy
 - Needle Core
 - Incisional
 - Excisional
- Adrenalectomy

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For the Members of the Cancer Committee, College of American Pathologists

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Registry Uses

81

- **Basic Statistics**
 - Incidence/Mortality/Survival
- **Cluster Investigations**
- **Cohort Studies**
- **Case Finding and Recruiting**

Cohort Studies on Cancer Risk

82

- Radiological Technicians – NCI
- PBB Cohort
- HIV Registry
- Autoworkers
- NIH and ACS Diet Studies
- Transplant Registry - NCI
- Adventist Cohort
- Black Women's Health Study
- Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial
 - Christine Cole-Johnson, HFHS

Cancer and Live Birth Data

83

- **Prenatal Factors and Breast Cancer Risk**
 - Jill Barnholtz-Sloan, PhD
WSU and Karmanos Cancer Institute
- **Pregnancy Outcomes in Childhood Cancer Survivors**
 - Merlin R. Hamre, MD, MPH
Children's Hospital of Michigan
- **Childhood Leukemia and Hematoblastoma**
 - Ali Artaman - MSU

Cancer – Case-finding and Recruiting

84

- **Brain Tumor Caregivers**
- **Survivors Study II – ACS**
- **Arsenic and Bladder Cancer**
- **Prostate Cancer Survivors**
- **Cancer Survivors Pain Mgt**
- **Neuroblastoma – NBS**
- **Forteo Study – Adverse Events**

Cancer Registry Uses in Genomics

85

- Identify at-risk patients
- Survey at-risk population
 - Assess knowledge and referrals
- Alert facility and provider of risk
 - ACOS Standard 2.3
 - ✦ - risk assessment/genetic counseling
- Recruit at-risk patients for interventions

HPV and Cancer – Developing Issues

86

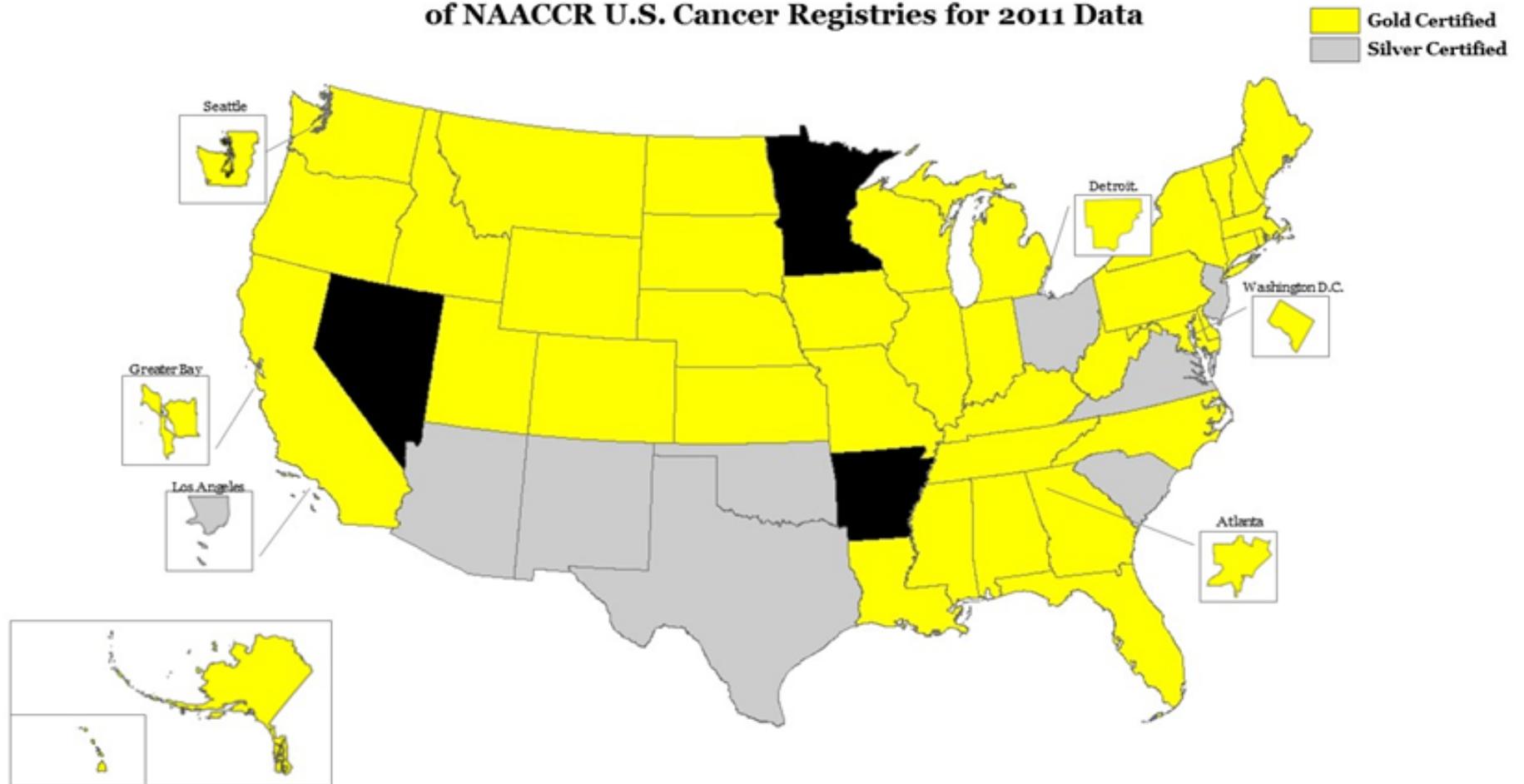
- **Approval of HPV Vaccine 2006**
 - Approved for females age 9 and above
 - Ideally Vaccinated before Initial Exposure
 - [Approved in 2009 for males (to prevent genital warts)]
- **Potential Reduction in HPV related Cancer**
 - Cervical, Vulvar, Oropharyngeal, Anal, Penile, Vaginal
- **Vaccine Prevents Infections of HPV Types 16/18**
- **Highly Effective in Preventing Infections Pre-exposure**
- **45% Prevalence in Sexually Active Females 20-24**

Registry Quality

87

- **Annual NAACCR Evaluation**
 - Gold Standard since 1999
 - Included in CINA, CINA deluxe
 - Included in USCS
- **Trust for America's Health**
 - Assigned an "A"
- **Annual NPCR Evaluation**
 - Included in CSS Database
- **CDC State Audit**
 - Continues to Improve

Gold and Silver Level Certification Status of NAACCR U.S. Cancer Registries for 2011 Data



Collection Methods

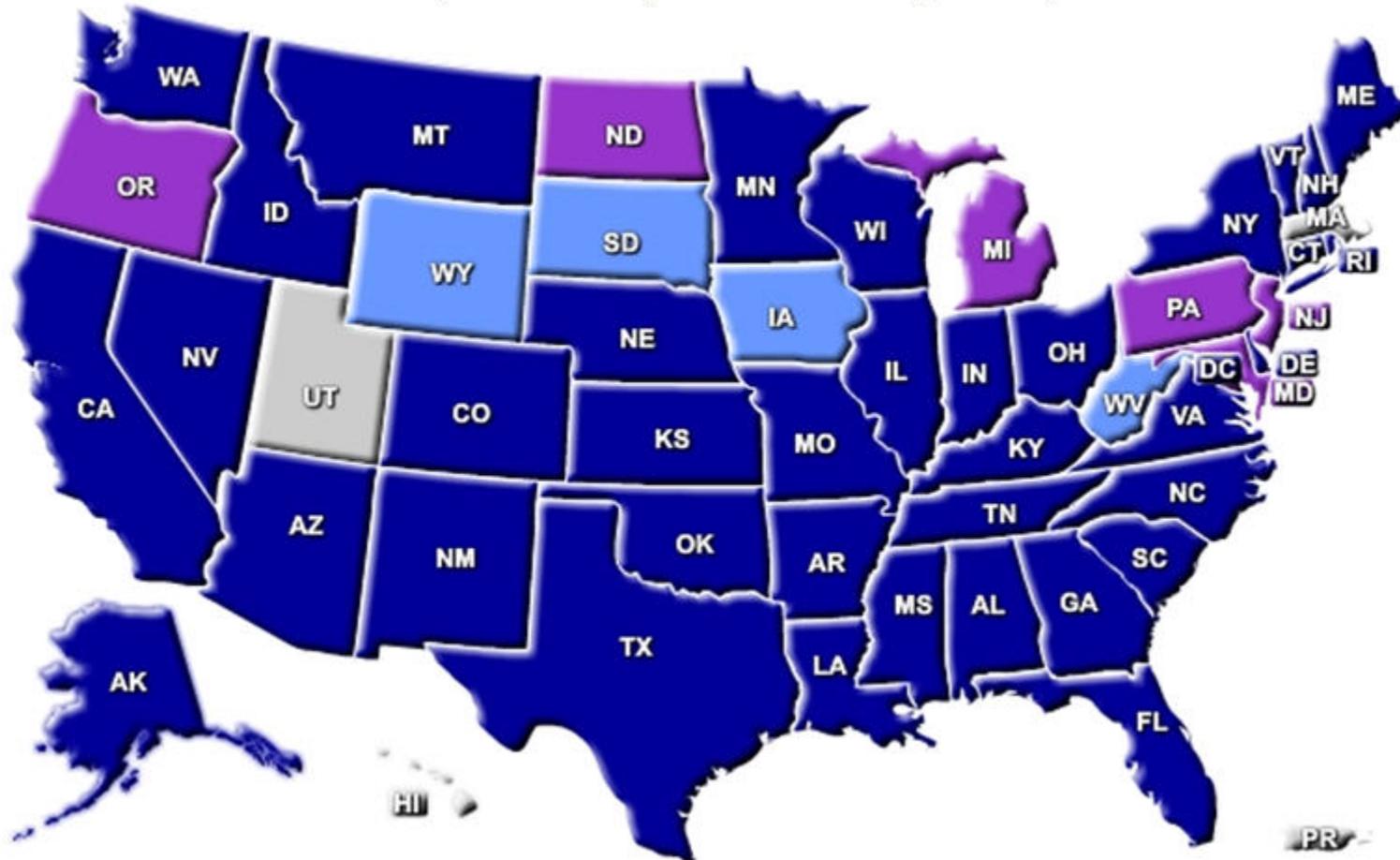
89

- **Passive Reporting**
 - Quality Assurance Reviews
- **Electronic or Paper Reports**
 - Accept NAACCR formatted files
- **Reports Initiated by Facilities**
- **Physicians contacted as needed**

Cancer - ePath

90

ePath Project Participants as of August 13, 2013



Michigan Birth Defects Registry

Some Key Facts



- Established by Act 236 of 1988
- Requires Reporting by Hospitals and Cytogenetics Laboratories
- Passive Reporting
 - Hospitals, Specialty Clinics, Cytology Labs
- Defined List of Reportable Conditions
- Reporting Began State Wide in 1992

Statement of Purpose



- **Source of Statistical Data**
- **Surveillance of Birth Defects Trends**
- **Permit Research into Etiology**
- **Enable Referral to Needed Services**

Reportable Conditions



- **Congenital Anomalies**
 - Excludes only minor conditions
- **Other Conditions that Associate**
 - Immune/Metabolic Deficiencies
 - Other Abnormalities
- **Infectious Disease Exposures**
 - Syphilis/Rubella/CMV/etc
- **Maternal Exposures**
 - Alcohol/Drugs/Toxic Agents

Statistical Data Now Available

www.michigan.gov/mdch



- 1992 through 2010 Birth Cohorts
- Numbers of Cases and Deaths
- Incidence and Mortality Rates
- Comparative Data on Live Births
- Information by Type of Condition
- County Level Data

Confidentiality



- **Protected by Law and Rule**
 - MCL 333.2631 – Rule 325.9074
- **HIPAA Public Health Exemption**
 - Privacy Rule - 45 CFR 164.512(a)
- **Access to Identifiable Data Restricted**
 - Patient/Family
 - Researchers
 - ✦ IRB, Scientific Advisory Panel, DCH Director
 - DCH Referral to Services

Registry Research Collaborations



- Birth Defects Among HIV Exposed Infants
- Mortality in Children with Birth Defects
- Evaluation of Potential Clusters
- Subsequent NTDs to Mothers with an NTD Child
- Analysis of Newborn Blood Spots
 - Children with Selected Birth Defects

Stage 2 Public Health Objectives

97

Objective	Ambulatory Measure	Hospital Measure
Immunization Registries	Ongoing Submission to Public Health Authority (Core)	Ongoing Submission to Public Health Authority (Core)
Reportable Lab Results (ELR)	N/A	Ongoing Submission to Public Health Authority (Core)
Syndromic Surveillance	Ongoing Submission to Public Health Authority (Menu)	Ongoing Submission to Public Health Authority (Core)
Cancer Registries	Ongoing Submission to Public Health Authority (Menu)	N/A
Specialized Registry	Ongoing Submission to Public Health Authority or National Specialty Society (Menu)	N/A

MU Standards

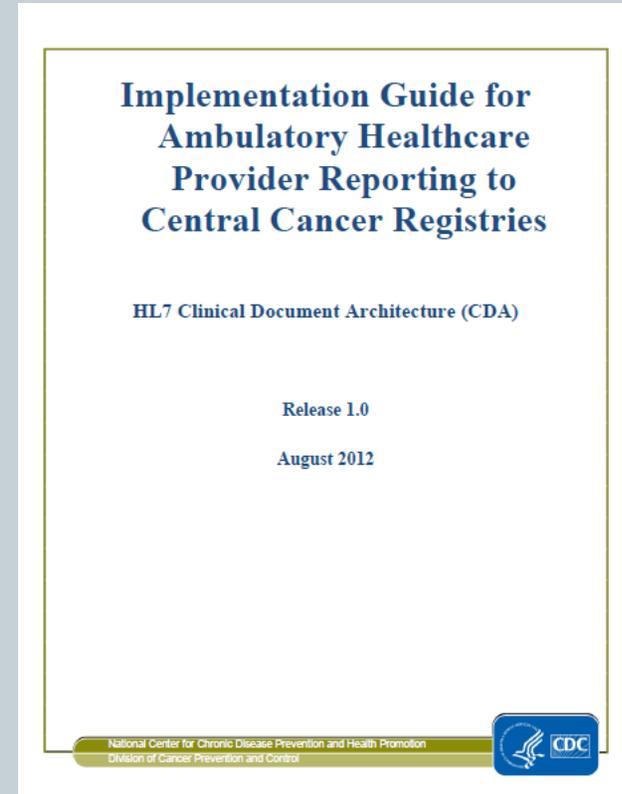
Public Health Domain	Exchange Standards	Vocabulary Standards
Immunization Registries (IIS)	Standard - HL7 2.5.1 <ul style="list-style-type: none"> HL7 2.5.1 Implementation Guide for Immunization Messaging Release 1.4 - Approved 7/15 	HL7 Standard Code Set CVX -- Vaccines Administered, updates through July 11, 2012
Reportable Lab Results (ELR)	Standard - HL7 2.5.1 <ul style="list-style-type: none"> HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 with Errata and Clarifications - Approved 7/15 	SNOMED-CT and Logical Observation Identifiers Names and Codes (LOINC®) Database version 2.40
Syndromic Surveillance	Standard - HL7 2.5.1 <ul style="list-style-type: none"> PHIN Messaging Guide for Syndromic Surveillance: Emergency Department and Urgent Care Release 1.1 August 2012 (Required for Inpatient and optional for ambulatory) - Approved 7/15 <p><i>Note: Ambulatory / In-patient Guide under development</i></p>	
Cancer Registries	CDA <ul style="list-style-type: none"> Implementation Guide for Ambulatory Healthcare Provider Reporting to Central Cancer Registries, August 2012 	IHTSDO SNOMED CT® International Release July 2012 and US Extension to SNOMED CT® March 2012 Release and LOINC
Specialized Registries		



National Efforts for MU in Cancer



- CDC, NPCR, NCI, SEER and NAACCR collaboration
- Created Implementation Guide
- Specifications for EHRs to Transmit
- Defines Use Cases, Vocabulary and messaging
- Guidances and Tools for PH
- http://www.cdc.gov/cancer/npcr/meaningful_use.htm



Birth Defects Surveillance Nationally

100

- **Organized Registries in 41 States**
- **Lacks uniform case definition**
- **Lacks uniform data set**
- **Lacks message standard**
- **National Coordinating Bodies**
 - **National Birth Defects Prevention Network**
 - ✦ **Has guidelines with standards in development**
 - **National Center for Birth Defects and Developmental Delay**
 - ✦ **Supports states and NBDPN activities**

Specialized Registries: An Opportunity to Streamline Public Health Reporting

Preparing a Specialize Registry for Stage 2 MU

Define a Uniform Case Definition

**Develop BD Interoperability
Implementation Guide for EHRs**

Develop Functional Data Flow Design

**Set up, Configure and Train Pilots for
BD Reporting**

Pilot Testing , Evaluation and Roll-out

Accomplishments



- **Develop Standards for Birth Defects Reporting**
 - Standard Case Definition
 - ✦ ICD=10 CM, SNOMED, LOINC
 - Interoperability Guide
 - ✦ Standardized Message and Data Structure
 - ✦ Reference case report message to standard CDA
 - Developed Transport Mechanism
- **Working Promote as National Standard**
 - Active application with HL7.org
 - Leveraging existing NBDPN HL7/EHR Work Group

Where are we are headed

103

- **Cancer and birth defects reporting specs posted**
 - Joins Infectious Disease, Immunization and Syndromic
 - www.MichiganHealthit.org
- **Soliciting vendors/providers for pilots**
 - Piloting of cancer messaging is ongoing
- **Transport Mechanism is now live**
 - Through MiHIN and state Data Hub
- **Looking to expand**
 - Laboratory cancer case reporting
 - Birth and death report messaging

Who to contact for help?

104

For questions regarding the Michigan Birth Defects Registry and **physician or facility reporting** contact Glenn Copeland at copelandg@michigan.gov.

For questions regarding the Michigan Cancer Surveillance Program and **physician reporting** contact Jetty Alverson at alversong@michigan.gov.

For questions regarding **meaningful use** and public health reporting contact the Department of Community Health's public health meaningful use team at DCHPublicHealthMU@michigan.gov .

Contact Laura Rappleye at laura.rappleye@altarum.org regarding cancer reporting **technical** information, testing and validation questions and OID creation/registration.

HITC Next Steps



Public Comment



Adjourn

